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*On the* ABORIGINAL INHABITANTS *of the* ANDAMAN ISLANDS.  
(Part II.) By E. H. MAN, Esq., F.R.G.S., &c.

[WITH PLATES VIII AND IX.]

IN the paper which I had the honour of reading here a few weeks ago I endeavoured to give you as much information as my time allowed relative to the physical characteristics of the race, and then touched briefly upon certain points connected with their culture. I propose this evening to speak of their marital relations, and to tell you of certain of their customs, superstitions, traditions, and beliefs; but before doing so I wish to say a few words in reference to the dialects or languages spoken by the various tribes, more especially the language spoken by the *bō'jig-ngī'ji*-, or South Andaman tribe. As I shall presently show, the people themselves have a legend<sup>1</sup> to account for the linguistical distinctions existing in their midst, but, on a subject of such importance as the origin of an unwritten language, the traditions current among the savages who speak it have rarely, if ever, I believe, been known to throw any light.

**Language.**—1. A few short lists of Andamanese words have been prepared from time to time, commencing, I think, with Colebrooke, who visited the islands nearly a century ago; but

<sup>1</sup> *Vide post* "Mythology," paragraphs 14 and 22.

owing to a variety of circumstances, not the least of which was the absence of any system of representing the sounds in the language—each author having chosen to employ a phonetic code best understood by himself and capable of varying interpretation by others—the result has been, to say the least, unsatisfactory, and the words for the most part are, in their printed form, either wholly unrecognisable by the people themselves, or possess a meaning differing very much from that given.

2. I do not make these remarks with a view of depreciating the efforts of others, for I fully recognise the difficulties with which they had to contend, and am aware that these exceeded any I have had to overcome, consequent on the improved relations which have subsisted between ourselves and the aborigines in recent years.

3. It must also be borne in mind that time necessarily works vast changes in all savage languages, which depend so entirely upon the oral correctness of the whole population for their accurate transmission.

4. As my knowledge of the other dialects is not as yet sufficient for me to be able to describe them comparatively at any length—leisure having failed me to obtain more than a few hundred words of five of the seven remaining tribes of Great Andaman—I wish it to be understood that, except where otherwise stated, my remarks refer to the *bō'jig-ngī'ji-*, or South Andaman dialect.

5. The Andamanese are, as a rule, very conservative, and prefer to coin from their own resources rather than to borrow from aliens, words expressing ideas or objects which are new to them. To give only one of many examples:—having themselves no forms of worship, they had no word for “prayer,” but since seeing the Mohammedans at their daily devotions, and learning that they are addressing an Invisible Being, they express the act by a compound word, *ārlalik-yā-b-*, signifying “daily repetition” (viz.: *ārla* daily, and *ik-yā-b-* repetition).

6. They have also a distinct poetical dialect, and in their songs subordinate everything to rhythm, the greatest liberties being thereby taken not only with the forms of their words, but even with the grammatical construction of the sentences. For instance the chorus of one of their songs runs thus:—

*chēklū yā lak'u mēj'rà?*

which means “who missed the hard (backed) turtle?” the prose construction of the sentence being *mīja yā-dī chēbalen lá kachīre?* It will be at once noticed how great is the difference between the two versions, for in this, as in most of their songs,

the words in their poetic form are so mutilated to suit the metre as to be scarcely recognisable; indeed, it not unfrequently happens that the composer of a new song has to explain its meaning in the ordinary vernacular to his chorus<sup>1</sup> as well as to the audience in general.

7. It may perhaps interest some of my readers to see a comparative table which I have prepared of the various forms of the possessive pronominal adjectives in most frequent use among five of the eight tribes of Great Andaman.

	<i>.bō-jig-ngī-jī-</i>	<i>.bō-jig-yā-b-</i>	<i>.ā-kā-kō-l-</i>	<i>.ōko-jū-wai-</i>	<i>.baṭ-awa-</i>
my ..	<i>ḍī-a-</i>	.. <i>tī-ya-</i>	.. <i>tī-ya</i>	.. <i>tī-ya</i>	.. <i>dege.</i>
thy ..	<i>ngī-a-</i>	.. <i>ngī-ya-</i>	.. <i>ngī-ya</i>	.. <i>ngī-ya</i>	.. <i>ngeg'e.</i>
his ..	<i>ī-a-</i>	.. <i>ī-ya-</i>	.. <i>ī-ya</i>	.. <i>ū-ya</i>	.. <i>eg'e.</i>
our ..	<i>mē-ta-</i>	.. <i>mī-ya-</i>	.. <i>mī-ya</i>	.. <i>mī-ya</i>	.. <i>mā tat.</i>
your ..	<i>ē-ta-</i>	.. <i>ngārdī-ra-</i>	.. <i>ngārdī-ra-</i>	.. <i>ngachā-par-</i>	.. <i>ngā tat.</i>
		.. <i>tī-ya-</i>	.. <i>tē-ya</i>	.. <i>tī-ya</i>	
their ..	<i>ō-nta-</i>	.. <i>nō-ngtā-le-</i>	.. <i>ō-ntā-le-</i>	.. <i>narā-ngoich-</i>	.. <i>ā tat.</i>
		.. <i>tī-ya-</i>	.. <i>eka-tē-ya</i>	.. <i>tī-ya</i>	

8. There are in each dialect several other forms of possessive pronominal adjectives, each of which must be used with its own class of nouns, but time will not permit me to enter into particulars regarding these. The form which, roughly speaking, is of general application among the *bō-jig-ngī-jī-* is, as I have just shown, that of *ḍī-a-*, *ngī-a-*, &c. Ex. :—*ḍī-a kā-rama-*, my bow; *mē-ta yā-ḍī-*, our turtle; the exceptions to its use being, (a) those nouns denoting human objects, (b) those indicating the various parts of the body,<sup>2</sup> and (c) certain other nouns denoting degrees of relationship. To be as brief as possible, I will give but one or two examples of each.

(a)

<i>ḍī-a-</i> , my..	..	..	<i>mē tat</i> , our	..	..	Ex. : <i>ḍī-a abū-la-</i> ,
<i>ngī-a-</i> , thy	..	..	<i>ē tat</i> , your	..	..	my man.
<i>ī-a-</i> , his ..	..	..	<i>ō ntat</i> , their	..	..	<i>mē tat at-pail-</i> ,
<i>ī-a-</i> , —'s	..	..	<i>l'ō ntat</i> , —'s	..	..	our women.

<sup>1</sup> I cannot here enter into particulars regarding their songs and choruses, an account of which will be hereafter given under "Games and Amusements."

<sup>2</sup> For a complete list of these *vide* Appendix G.

## (b)

I. Used with words indicating the head, brain, occiput, scalp, neck, nape, chest, lung, heart, &c.

<i>dôt</i> , my .. ..	<i>mô'tot</i> , our .. ..	Ex.: <i>dôt chē ta-</i> , my head. <i>ô'tot lô'ngota-</i> , their necks.
<i>ngôt</i> , thy .. ..	<i>ngô'tot</i> , your .. ..	
<i>ôt</i> , his .. ..	<i>ô'tot</i> , their .. ..	
<i>l'ôt</i> , —'s .. ..	<i>l'ô'tôt</i> , —'s' .. ..	

II. Used with words indicating the hand, finger, wrist, knuckle, nail, foot, toe, heel, ankle, &c.

<i>dông</i> , my .. ..	<i>môi'ot</i> , our .. ..	Ex.: <i>ngông tô'go-</i> , thy wrist. <i>ô't'ot pág-</i> , their feet.
<i>ngông</i> , thy .. ..	<i>ngôi'ot</i> , your .. ..	
<i>ông</i> , his .. ..	<i>ôi'ot</i> , their .. ..	
<i>l'ông</i> , —'s .. ..	<i>l'ôi'ot</i> , —'s' .. ..	

III. Used with words indicating the shoulder, arm, breast, face, temple, cheek, nose, ear, eye, gum, tear, tooth, &c.

<i>dig</i> , my .. ..	<i>mit'ig</i> , our .. ..	Ex.: <i>ngig tô'go-</i> , thy shoulder. <i>mit'ig tûg-</i> , our teeth.
<i>ngig</i> , thy .. ..	<i>ngit'ig</i> , your .. ..	
<i>ig</i> , his .. ..	<i>it'ig</i> , their .. ..	
<i>l'ig</i> , —'s .. ..	<i>l'it'ig</i> , —'s' .. ..	

(N.B.—The words for eye, eye-lid, and eye-lash, generally take the abbreviated form, *dî*, *ngî*, *î*, *mit'î*, *ngit'î*, *it'î*.)

IV. Used with words indicating the body, back, spine, thigh, calf of leg, elbow, knee, rib, stomach, spleen, liver, shoulder-blade, &c.

<i>dab</i> , my .. ..	<i>mat</i> , our .. ..	Ex.: <i>dab chàu-</i> , my body. <i>at pá'retá-</i> , their ribs.
<i>ngab</i> , thy .. ..	<i>ngat</i> , your .. ..	
<i>ab</i> , his .. ..	<i>at</i> , their .. ..	
<i>l'ab</i> , —'s .. ..	<i>l'at</i> , —'s' .. ..	

V. Used with the words indicating leg, hip, loin, bladder, &c.

<i>dar</i> , my .. ..	<i>mar'at</i> , our .. ..	Ex.: <i>dar chág-</i> , my leg. <i>ar'at chố'rog-</i> , their hips.
<i>ngar</i> , thy .. ..	<i>ngar'at</i> , your .. ..	
<i>ar</i> , his .. ..	<i>ar'at</i> , their .. ..	
<i>l'ar</i> , —'s .. ..	<i>l'ar'at</i> , —'s' .. ..	



VI. Used with words indicating mouth, chin, lip, throat, palate, tongue, gullet, jaw-bone, collar-bone, breath, &c.

<i>dá·kà</i> , my .. ..	<i>mak·at</i> , our .. ..	Ex. : <i>ngá·kà bang-</i> , thy mouth.
<i>ngá·kà</i> , thy .. ..	<i>ngak·at</i> , your .. ..	<i>ak·at ê kib-</i> , their jaw-bones.
<i>á·kà</i> , his .. ..	<i>ak·at</i> , their .. ..	
<i>l'á·kà</i> , —'s .. ..	<i>l'ak·at</i> , —s' .. ..	

VII. Used apparently only with the word indicating waist.

<i>dó·to</i> , my .. ..	<i>mó·to</i> , our .. ..	Ex. : <i>dó·to kī·nab-</i> , my waist.
<i>ngó·to</i> , thy .. ..	<i>ngó·to</i> , your .. ..	<i>mó·to kī·nab-</i> , our waists.
<i>ó·to</i> , his .. ..	<i>ó·to</i> , their .. ..	
<i>l'ó·to</i> , —'s .. ..	<i>l'ó·to</i> , —s' .. ..	

I.

(c)

<i>dab</i> , my .. ..	<i>mat</i> , our .. ..	Ex. : <i>dab mai·ola</i> , my father.
<i>ngub</i> , thy .. ..	<i>ngat</i> , your .. ..	<i>dab ê·tinga-</i> , my mother.
<i>ab</i> , his .. ..	<i>at</i> , their .. ..	
<i>l'ab</i> , —'s .. ..	<i>l'at</i> , —s' .. ..	

II.

<i>dá·kà</i> , my .. ..	<i>mak·at</i> , our .. ..	Ex. : <i>dá·kà kám-</i> , my younger brother.
<i>ngá·kà</i> , thy .. ..	<i>ngak·at</i> , your .. ..	
<i>á·kà</i> , his .. ..	<i>ak·at</i> , their .. ..	
<i>l'á·kà</i> , —'s .. ..	<i>l'ak·at</i> , —s' .. ..	

III.

<i>dar</i> or <i>dár</i> , my .. ..	<i>mar·at</i> , our .. ..	Ex. : <i>dar ô·dire</i> , my son.
<i>ngar</i> or <i>ngár</i> , thy .. ..	<i>ngar·at</i> , your .. ..	
<i>ar</i> or <i>ár</i> , his .. ..	<i>ar·at</i> , their .. ..	
<i>l'ar</i> or <i>l'ár</i> , —'s .. ..	<i>l'ar·at</i> , —s' .. ..	

IV.

<i>dai</i> , my .. ..	<i>mē·tat</i> , our .. ..	Ex. : <i>dai ik·yá·te-</i> , my wife.
<i>ngai</i> , thy .. ..	<i>ē·tat</i> , your .. ..	<i>ó·ntat pail-</i> , their wives.
<i>ai</i> , his .. ..	<i>ó·ntat</i> , their .. ..	
<i>l'ai</i> , —'s .. ..	<i>l'ó·ntat</i> , —s' .. ..	

V.

<i>ad</i> , my .. ..	<i>mē·tat</i> , our .. ..	Ex. : <i>ad ik·yá·te-</i> , my husband.
<i>ang</i> , thy .. ..	<i>ē·tat</i> , your .. ..	<i>ē tat bū·la-</i> , your husbands.
<i>á</i> , his .. ..	<i>ó·ntat</i> , their .. ..	
<i>l'á</i> , —'s .. ..	<i>l'ó·ntat</i> , —s' .. ..	

## VI.

<i>ad-en</i> , my .. ..	<i>am-et</i> , my .. ..	Ex.: <i>ad-en tó-bare</i> , my elder brother. <i>ang-et tó-bare-pail</i> , your elder sisters.
<i>ang-en</i> , thy .. ..	<i>ang-et</i> , your .. ..	
<i>á-en</i> , his .. ..	<i>á-et</i> , their .. ..	
<i>l'á-en</i> , —s' .. ..	<i>l'á-et</i> , —s' .. ..	

## VII.

<i>dōt</i> , my .. ..	<i>mō'tot</i> , our .. ..	Ex.: <i>dōt chd'tnga</i> , my adopted son.
<i>ngōt</i> , thy .. ..	<i>ngō'tot</i> , your .. ..	
<i>ōt</i> , his .. ..	<i>ō'tot</i> , their .. ..	
<i>l'ōt</i> , —s' .. ..	<i>l'ō'tot</i> , —s' .. ..	

## VIII.

<i>deb</i> , my .. ..	<i>mēb'et</i> , our .. ..	Ex.: <i>deb aden'ire</i> , my step-son.
<i>ngeb</i> , thy .. ..	<i>ngeb'et</i> , your .. ..	
<i>eb</i> , his .. ..	<i>eb'et</i> , their .. ..	
<i>l'eb</i> , —s' .. ..	<i>l'eb'et</i> , —s' .. ..	

9. Lieutenant R. C. Temple, in his Notes on my translation of the Lord's Prayer into *bō'jig-ngī'ji*- quotes some of the remarks made by Dr. Caldwell on the Australian languages, which he considers can with perfect truth be applied to the Andamanese dialects. The grammatical structure exhibits a general agreement with the languages of the Scythian group; in both we find the use of post positions instead of prepositions; they also agree in the formation of inceptive, causative, and reflective verbs by the addition of certain particles to the root, as well as generally in the agglutinative structure of words and their position in a sentence.

10. In the same work, six sentences in *bō'jig-ngī'ji*- and *bō'jig-yá'b-b*<sup>1</sup>, such as would occur in daily conversation, are given as examples to illustrate the diversity of speech in two adjacent tribes. Only three out of some thirty words are there

<sup>1</sup> Or, in the language of that district, *pū'chik-wár*-. Both *yáb*- in South Andaman, and *wár*- in South of Middle Andaman, signify "language." As will shortly be explained under "Mythology," the belief held by all, or the majority of the tribes of Great Andaman, is that the *bō'jig-yá'b-b*- is the original language spoken by their remote ancestors, and from which the various other existing dialects have sprung. The word *bō'jig* is used in a special sense to denote "our," or "our style of." Ex.: *bō'jig-ngī'ji*- (the South Andaman tribe's name for itself), literally, *our* friends; *bō'jig-yá'b-b*, (their name for the tribe on their northern border), literally, *our* language; *mij'a ngen ká'to bō'jig ká'rama má'nre*? Who gave you that *bō'jig* (i.e., our style of) bow? [As shown in Appendix B, item 1, this term is used to distinguish the description used by the five tribes occupying Middle and South Andaman and the Archipelago, from the bows of the *yē'rewa*- (i.e., the three North Andaman tribes), and the *jār'awa*-.]

shown to be the same in both languages, while they differ in *every inflection*, from which fact it will readily be understood that, apart from the great difficulties of inter-communication, the task of acquiring a knowledge of the dialects of the remaining eight tribes must be one involving considerable sacrifice of time and labour, such as, I fear, it is hopeless to expect any government officer unless specially deputed for the work will be able to accomplish during his term of service.

11. Before concluding this part of my subject I will read an extract from a letter received last August from my friend and fellow-worker in this branch of my studies, Lieutenant R. C. Temple (cantonment magistrate at Ambála), which he authorises me to publish as embodying his opinion after a careful study of the vocabularies and other data which I have collected and forwarded to him: "The Andaman languages are one group; they are like (*i.e.*, connected with) no other group; they have no affinities by which we might infer their connection with any other known group. The word-construction (the etymology of the old grammarians) is two-fold, *i.e.*, they have affixes and prefixes to the root of a *grammatical* nature. The general principle of word-construction is agglutination pure and simple. In adding their affixes they follow the principles of the ordinary agglutinative tongues; in adding their prefixes they follow the well-defined principles of the South African tongues. Hitherto, as far as I know, the two principles in full play have never been found together in any other language. Languages which are found to follow the one have the other in only a rudimentary form present in them. In Andamanese both are fully developed, so much so as to interfere with each other's grammatical functions. The collocation of the words<sup>1</sup> (or 'syntax,' to follow the old nomenclature) is that of the agglutinative languages purely. The presence of the peculiar prefixes does not interfere with this; the only way in which they affect the syntax is to render the frequent use possible of long compounds almost polysynthetic in their nature, or, to put it another way, of long compounds which are sentences in themselves, but the construction of these words is not synthetic but agglutinative, and they are *as words* either compound nouns or verbs taking their place in the sentence, and having the same relation to the other words in it as they would were they to be introduced into a sentence in any other agglutinative language. There are of course many peculiarities of grammar in the Andamanese group, and even in each member of the group, but these are only

<sup>1</sup> For an example of this the reader is referred to "*Wō'i's statement*," which will be found in Appendix F.

such as are incidental to the grammar of the other languages, and do not affect its general tenor. I consider, therefore, that the Andamanese languages belong to the agglutinative stage of development, and are distinguished from other groups by the presence in full development of the principle of prefixed and affixed grammatical additions to the roots of words."

12. With so wide a range of subjects as I propose including in my present paper, I must not detain you with any further remarks on the Andamanese dialects, however interesting they may be to many here present. I have the less scruple in dealing thus cursorily with this important point in the study of this race, as I trust we may hope shortly to see a paper from the able pen of Mr. A. J. Ellis, F.R.S.,<sup>1</sup> whom I have been so fortunate as to interest, and who has kindly consented to examine my dictionary, containing probably about 6,000 words<sup>2</sup> with examples of their use, together with a copious treatise on the Grammar prepared by Lieutenant Temple from my notes.<sup>3</sup>

**Adoption.**—1. I have already pointed out to you several instances in which we find, on closer acquaintance with the race, that mistaken views have been entertained, and that both astonishment and merriment were evoked from the aborigines by the narration of certain of the habits and customs attributed to them, especially in connection with their social and marital relations.

2. It is generally admitted that one of the surest tests of a man's character may be found in the treatment women meet with at his hands; judged by this standard these savages are qualified to teach a valuable lesson to many of the fellow-countrymen of those who have hastily set them down as "an anomalous race of the most degraded description."

3. I have already mentioned that self-respect and modesty characterise their intercourse with one another, and that the

<sup>1</sup> I am happy to be able to add before going to press that a valuable paper on the South Andamanese language was incorporated by Mr. Ellis in his annual presidential address, which was delivered before the Philological Society on the 19th May, 1882.

<sup>2</sup> And yet we find it stated by Figuier that "language is extremely limited among them;" and by Surgeon-Major Hodder that it "consists of a few words, and these sound harsh and explosive, and are principally monosyllables;" but it will be sufficient to refer to Mr. Ellis's interesting digest of the Andaman MSS. above mentioned, and to *Wü's* statement (Appendix F), to disprove the assertions of these writers.

<sup>3</sup> I would take this opportunity to express my acknowledgments of the great assistance afforded me by Mr. Temple in my philological researches. The result of his study of my vocabulary and notes on the Andamanese languages during a little over two years, is comprised in a large number of MSS. on the Grammar (above referred to) which, from lack of leisure, he has been compelled reluctantly to return to me for completion.

young are early instructed in the duties of hospitality, while the aged, the suffering, and the helpless are objects of special attention; that their moral code is not confined within these limits will be seen as I proceed.

4. The curious, but by no means uncommon,<sup>1</sup> savage custom of adoption prevails among them, from which, however, it must not be inferred that love of offspring is a characteristic in which they are at all deficient, for this is far from being the case.

5. It is said to be of rare occurrence to find any child above six or seven years of age residing with its parents, and this because it is considered a compliment and also a mark of friendship<sup>2</sup> for a married man, after paying a visit, to ask his hosts to allow him to adopt one of their children. The request is usually complied with, and thenceforth the child's home is with his (or her) foster-father (*mai-ôt-châ-tnga*): though the parents in their turn adopt the children of other friends, they nevertheless pay continual visits to their own child, and occasionally ask permission (!) to take him (or her) away with them for a few days.

6. A man is entirely at liberty to please himself in the number of children he adopts, but he must treat them with kindness and consideration, and in every respect as his own sons and daughters, and they, on their part, render him filial affection and obedience.

7. It not unfrequently happens that in course of time permission to adopt a foster-child is sought by a friend of the *soi-disant* father, and is at once granted (unless any exceptional circumstance should render it personally inconvenient), without even the formality of a reference to the actual parents, who are merely informed of the change in order that they may be enabled to pay their periodical visits.

8. Foster-parents constantly manifest much opposition to any desire they may observe on the part of the lads they have brought up, to make a home for themselves, for the selfish reason that they are useful in a variety of ways, above all, when they have acquired skill in hunting, turtling, &c.; over the maidens little or no restraint is imposed, as their marriage entails but a trifling loss in a material sense on those who have reared them.

9. Human nature, however, is the same all the world over, and boys will be boys even in the Andaman jungles, so it is not surprising that, in spite of all the precautions taken by their

<sup>1</sup> Vide Lubbock "On the Origin of Civilization," &c., p. 96.

<sup>2</sup> Whether this be the true explanation of its object and origin or not, there can be little doubt that it has the effect of greatly extending the intercourse between the members of the various encampments.

seniors, a good deal of flirtation, and often something more, is carried on by the young people without arousing any suspicions as to their sentiments for one another, until the affair has become too serious to be broken off, and has to end, sooner or later, in their marriage and start in life on their own account. In some cases, when the guardians have reason to believe that a lad has, notwithstanding his assurances to the contrary, a *sub silentio* attachment, they adopt the following method for testing the truth of his asseveration; on a given day it is arranged by the friends of the suspected couple that they shall (without the knowledge of either) be painted respectively with the red oxide of iron unguent, *kò'ob-*, and the white clay *tâ-la-ōg-*, for, as they would not meet till night-fall, the risk of their discovering the trap laid for them is reduced to a minimum, while a glance on the following morning would suffice to betray them if guilty, and the guardians' object would be attained, for, from shame at his secret being known, and his falsehood exposed, the youth feels in honour bound to break off his connection with the girl, at least for some time.

**Relationships.**—1. In all the relations of life the question of propinquity is, in their eyes, of paramount importance, and marriage is only permissible between those who are known to be not even distantly connected, except by wedlock, with each other; so inexorable, indeed, is this rule, that it extends, and applies equally, to such as are related merely by the custom of adoption to which I have just referred.

2. A first cousin, actual or by adoption, is regarded as a half-brother or half-sister, as the case may be, and nephews and nieces almost as sons and daughters, while the terms used to denote a grandfather, grandmother, grandson, and grand-daughter are equally applied to indicate respectively a grand-uncle, grand-aunt, grand-nephew, and grand-niece.

3. Parents, when addressing, or referring to their children and not using their names, employ distinct terms, the father calling his son *dar ô'dire*, i.e., he that has been begotten by me, and his daughter *dar ô'dire-pail-*; while the mother makes use of the word *dab ê'tire*, i.e., he whom I have borne, for the former, and *dab ê'tire-pail-* for the latter; similarly, friends in speaking of children to their parents say respectively, *ngar ô'dire* or *ngab ê'tire* (your son), *ngar ô'dire-pail-*, or *ngab ê'tire-pail-* (your daughter).<sup>1</sup>

4. Uncles and aunts on the father's side are not distinguished from those on the mother's side; relationships are traced in both lines, and the system with reference to either sex is identical.

<sup>1</sup> Foster-parents employ the terms *dôl chá'tnga-* and *dôl chá'tnga-pail-* in referring to their adopted son and daughter respectively.



5. In consequence of the shortness of their lives, their ignorance of any method of maintaining accurate records, and last, not least, the unavoidable complications arising from their system of adoption, it naturally follows that they fail in tracing, and therefore in recognising, relationships beyond the third generation.

6. In addressing a senior male relative, the term *mai'a* or *mai'ola* is employed; if of equal standing, and a father, the same; but if not a parent, the term *mar* is prefixed to his name; if junior, he would be addressed by his name only. The same system applies to the females, with whom *chân'a*<sup>1</sup> or *chân'ola* takes the place of *mai'a* and *mai'ola*, and the "flower" name, to which I can now make but a brief allusion,<sup>2</sup> the place of *mar*; these terms, *mai'a*, *chân'a*, &c., are equivalent to Mr., Sir, Mrs., Madam, &c.<sup>3</sup> Sir John Lubbock, in his well known work "On the Origin of Civilization,"<sup>4</sup> points out the existence of a similar custom among the *Telugus* and *Tamils*.

7. In a table I have prepared,<sup>5</sup> and which I believe to be fairly complete, there are about sixty terms, exclusive of equivalents, employed to denote the various degrees of relationship recognised by this race. It will there be seen that, as among the Australians near Sydney, mentioned by the Rev. W. Ridley,<sup>6</sup> brothers and sisters speak of one another by titles that indicate relative age; that is, their words for brother and sister involve the distinction of elder or younger, and that a like system is adopted in respect to half-brothers, half-sisters, cousins, brothers-in-law, and sisters-in-law.

8. In addressing the relatives of a wife or husband, or a brother's wife, or sister's husband—provided such be senior to the speaker—the term *mâm* is used.

9. A man or woman may not marry into the family of their brothers- or sisters-in-law, but there is no rule against a man marrying a girl bearing the same name as himself, either in another tribe or in his own community, the *only* bar being that of consanguinity or adoption.

10. The nearest of kin to a widow or widower are, (1) the grown-up children, (2) the parents, and (3) the brothers and sisters.

**Proper Names.**—1. One of the alleged<sup>7</sup> peculiarities of the

<sup>1</sup> Not "*Chamah*," as given by Dr. Day.

<sup>2</sup> *Vide* next section, paragraph 3.

<sup>3</sup> "According to Williams ('Fiji and the Fijians') their (*i.e.*, the Fijian) languages contain expressions which exactly correspond to the French *Monsieur* and *Madame*." (Peschel, p. 346.)

<sup>4</sup> *Vide* 4th edition, p. 164.

<sup>5</sup> *Vide* Appendix I.

<sup>6</sup> *Vide* "Journ. Anthropol. Inst." vol. ii, p. 266.

<sup>7</sup> *Vide* Tickell.

Andamanese is that they have no proper names, whereas their system of naming is, on the contrary, somewhat elaborate, and commences even prior to the child's birth.

2. When there is reason to expect an increase to the family,<sup>1</sup> the parents decide what name the child shall bear; as a compliment they not unfrequently select one which is borne by a relative, friend, or chief; and, since all their proper names<sup>2</sup> are common to both sexes,<sup>3</sup> no difficulty arises on this score.

3. In illustration of this let us suppose the name chosen in advance to be *.dô-ra*; should the infant prove to be a boy he is called *.dô-ra-ô-ta-*, or, if a girl, *.dô-ra-kâ-ta-*. These terms (*ô-ta-* and *kâ-ta-*<sup>4</sup>) are used only during the first two or three years, after which, until the period of puberty, the lad would be addressed as *.dô-ra-dâ-la-*, and the girl as *.dô-ra-pô-ilola* until she arrived at womanhood, when she is said to be *ân-lâ-wi-* or *â-kâ-lâ-wi-*, and receives a "flower" name<sup>5</sup> as a prefix to her proper or birth name. By this method they are apparently able to determine when their young women become marriageable. There are eighteen prescribed trees<sup>6</sup> which blossom in succession, and the "flower" name bestowed in each case is taken from the one which is in season when the girl attains maturity; if, for example, this should be about the end of August, when the *chá-langa-* (*Pterocarpus dalbergioides*) is in flower, *.dô-ra-pô-ilola* would become *.chá-gara'* *.dô-ra*, and this double name would cling

<sup>1</sup> When near her delivery a woman will sometimes be heard saying (assuming the name chosen for the yet unborn child to be *.wô'loga*): *.wô'loga dab-ô-jolike*, *Wô'loga* is fidgetting me, or *.wô'loga dab-ngô towake*, *Wô'loga* is clawing me, or, *.wô'loga ô-to-yârke*, *Wô'loga* is ready. [During the period of pregnancy, both the woman and her husband are spoken of as *pîj-jâ-bag-*, which signifies "bad hair"; the only explanation offered for the adoption of such a term is that it is in allusion to the fetus.]

<sup>2</sup> These number forty. (*Vide* Appendix H.)

<sup>3</sup> A man calls a male namesake { if his senior, *mai a ting'la*.  
if his equal } *mar ting'la*.  
or junior }  
" " female " *chân ting'la*.

A man (or woman) calls a child { *âd-ô-ting'ati-yâ-te-*  
of either sex bearing the (my).  
same name }

A woman calls a male namesake { if her senior, *mai'a* (his name) *ting'la*.  
if her equal } *mar* (his name) *ting'la*.  
or junior }

" " female " if her senior, *chân ting'la*.  
" " " " if her equal } (her name) *ting'la*.  
or junior }

<sup>4</sup> Signifying respectively the genitals of the male and female.

<sup>5</sup> Dr. Day writes: "Girls arriving at a marriageable age wear certain flowers to distinguish themselves by"; but, as a fact, the flower is neither worn nor gathered.

<sup>6</sup> Names of these will be found in Appendix H.

<sup>7</sup> Euphonic corruption of *.chá-langa-*.



to the girl until she married and was a mother,<sup>1</sup> then the "flower" name would give way to the more dignified term *chān'a* (madam or mother) *dō'ra*; if childless, a woman has generally to pass a few years of married life before she is called *chān'a*,<sup>2</sup> after which no further change is made in her name.

4. In consequence of this system, as it rarely happens that in one community two women are found bearing the same "flower" and birth names, there is little chance of confusion arising.

5. Since no equivalent custom exists with regard to men,<sup>3</sup> nicknames are given which generally indicate some personal peculiarity, as, for instance, *bī'a-pāg-* (*Bī'a-*, foot, he having large feet), *bal'a-jō'bo-* (*Bal'a-*, snake, he having lost a hand from a snake-bite), *pū'nga-dā'la* (*Punga-*, good-looking), and so on. All these names cling to the bearer for life, especially if they refer to some physical deformity.

6. Seniors often address young married persons in a (to us) strange fashion, *i.e.*, calling the husband by the wife's name and prospective designation; for example, in speaking to a man whose name is *ā'ra*, and who had married a woman called *tū'ra*, they would say *chān'a tū'ra*; if the wife were *enceinte* the child's name would be used beforehand to denote its parents; thus, assuming *wō'loga* to be the name of the yet unborn child, the father would be called by that name, and the expectant mother *wō'loga-būd-*<sup>4</sup> until after the birth of the infant, when, for several months, the former would still bear the same appellation among his seniors, but would receive from his juniors the more dignified title of *mai'a wō'loga*; while the latter would be addressed by her seniors as *wō'loga-ō'ta-* (or *kā'ta-* in the case of her child being a girl), and by her juniors as *chān'a wō'loga-ō'ta-* (or *kā'ta-*).<sup>5</sup>

**Initiatory Ceremonies.**—1. On or soon after reaching puberty, the fast<sup>6</sup> which has been kept during the few previous years (or in some cases, months) is broken; and instead of the affix *dā'la*, the prefix *gū'mā'* (denoting in this connection a neophyte or

<sup>1</sup> From the account given under "Marriage," paragraph 4, it will be inferred that in many cases she has not long to wait.

<sup>2</sup> *Vide* section on "Relationships," paragraph 6.

<sup>3</sup> In a few cases nicknames are bestowed on women.

<sup>4</sup> *būd* signifies house, habitation.

<sup>5</sup> For further information on the subject of proper names and terms applied to men and women, *vide* sections on "Relationships" and "Initiatory Ceremonies," and Appendices I and K.

<sup>6</sup> *Vide* section on "Tabu."

<sup>7</sup> In Dr. Day's paper the following passage occurs:—"The youthful swain eats a peculiar kind of ray-fish termed *goom-dah*, which gives him the title to the appellation of *goo-mo*, signifying, 'a bachelor desirous of marrying.' Girls arriving at a marriageable age . . . (*vide* footnote 5 on previous page). Before marrying, young men take a species of oath, after which they sit very still for several days, scarcely taking any food." Plausible as this explanation

novice) is attached to the boy's birth-name; he is also addressed as *mar*<sup>1</sup> *gūma* (master novice) if senior to, and alone with the speaker: this term *gūma* is retained until the lad is married and is a father, after which *mai'a*<sup>2</sup> (Mr.)—or, if a chief, *maiola*—is adopted in its place, and by this title he would be known for the rest of his life. A young chief, however, attains the honorary designation of *mai'a* as soon as the novitiate terminates.<sup>3</sup>

2. The *â-kà-yâ-ba*-, or fasting period (during which turtle, honey, pork, fish, and a few other favourite articles of food<sup>4</sup> are *choses défendues*), commences between the 11th and 13th year, and varies in length from one to five years; it is observed by both sexes, but lasts longer in the case of girls, with whom, indeed, it is not terminable till some time after matrimony. As an *â-kà-yâ-b*-makes up for these restrictions by eating a larger quantity of other food, he (or she) does not ordinarily suffer in physique during the probationary period. It does not rest with the youth or maiden to determine when he, or she, will resume eating the various articles above mentioned, but with the chief, who decides when each individual's powers of endurance and self-denial have been sufficiently tested. Exceptional cases are cited in which the probationer has expressed a desire to prolong the time of abstinence, it being a cause for boasting when the average period has been exceeded.

3. As at present understood, the *â-kà-yâ-ba*- is regarded as a test of the endurance, or, more properly speaking, of the self-denial of young persons, and as affording evidence of their fitness and ability to support a family. It is divided into three periods: 1st, the *yâ-dî*- (turtle) *gūmul*-; 2nd, the *â-ja*- (honey) *gūmul*-; and 3rd, the *reg-jî-rî*- (kidney-fat of pig) *gūmul*-.<sup>5</sup>

4. When the youth is permitted, and agrees, to break his turtle fast, a feast is arranged by his friends, consisting entirely of that delicacy. The chief, or headman present, first boils in a pot (*bûj*-.<sup>6</sup>) a large piece of turtle-fat, which, when sufficiently cool, he

may appear, there is no connection between *gūm*-, a ray-fish, and *gūma* (a youth who has undergone his probationary fast); moreover, as mentioned in a foregoing section (*vide* "Proper Names"), marriageable young women do not derive their "flower" names in the manner here described; in point of fact, no such custom as "wearing flowers" is practised by any class.

<sup>1</sup> *Vide* section on "Relationships," paragraph 6.

<sup>2</sup> As with the term *chûwa* among women, the title is not bestowed for several years if there be no child.

<sup>3</sup> Both before and after the *â-kà-yâ-ba*- the individual is said to be *bô-tiga*-.

<sup>4</sup> These comprise the flesh of the iguana and *paradoxurus*, the larvæ of the Great Capricornis beetle (*ô-yum*-), and a smaller insect called *bûtu*-.

<sup>5</sup> It will thus be seen that the *gūmul*- answers very much to the Australian "bora," or ceremony of initiation into the privileges of manhood, spoken of by the Rev. W. Ridley in his Report on Australian Languages and Traditions (*vide* "Journ. Anthropol. Inst.," vol. ii, p. 269, 1873).

<sup>6</sup> *Vide* Appendix B, item 18.

pours over the head of the lad, who remains seated and perfectly still in the midst of his friends while the oil streams over his body. The men present remove any ornaments that he may be wearing, and rub the grease into his person; the women and children meantime occupy themselves with crying, the idea being that, after abstaining from turtle for a long time, madness, illness, or even death, may result from partaking of it again.<sup>1</sup> After this the novice, who may not wash off the oil with which he has been anointed at least until late on the following day, is fed with the flesh of the turtle,<sup>2</sup> of which a certain quantity is reserved for his consumption on the ensuing two or three days, and the remainder is distributed among those assembled. He is then led to his hut and directed to sit cross-legged on a spot covered with leaves of the *Myristica longifolia*, with a support behind him against which he may lean. The turtle flesh, previously cooked and set apart for him, is deposited at his side, and one or more of his friends take it by turns to sit with him, it being their duty to enjoin silence, to supply his wants, and to prevent him from falling asleep by singing from time to time as the night wears away. The following morning his mother, sister and other female relatives, come and weep<sup>3</sup> over him, and paint, first, his ears and the adjoining parts with *yâ-dî-kô-iob-*, and afterwards his entire person with alternate stripes of this compound and *tâ-la-ôg-*. Some large leaves<sup>4</sup> made into two broom-like bundles are placed in his hands, and other leaves are placed in his waistbelt. Thus provided he rises and dances frantically,<sup>5</sup> swinging his arms at the same time, for an hour or more, while the women, who are seated with legs outstretched, keep time for him by slapping the hollow between their thighs with the palm of the right hand, which is held at the wrist by the other hand; the males look on, or, if they have gone through the ceremony themselves, accompany him in his performance.

5. After an hour or so, when, fatigued with his exertions, the youth stops dancing, the *yâ-dî-gû-mul-* is considered at an end, and the new *gû-ma* mingles with his friends, who, nevertheless,

<sup>1</sup> The same reason is given for the silence which the neophyte has to observe during this ceremony, as well as at the *â-ja-gû-mul-* and *reg-jî-ri-gû-mul-*.

<sup>2</sup> He is then said to *gû-mul mäg'ke* (or *gû-mul lē'ke*), i.e., to eat, or devour, the *gû-mul-*.

<sup>3</sup> The reason given for this demonstration of grief is that the youth has now entered upon an important epoch in his life, and is about to experience the trials and vicissitudes incidental thereto.

<sup>4</sup> The leaves of the *Myristica longifolia* (*bô-rowa-*) are usually selected on these occasions, apparently because this tree is associated with turtle-hunting, paddles being made of the wood.

<sup>5</sup> The step is a peculiar one, and is only seen on these occasions: the performer keeps his heels together and stamps on the ground, at the same time he swings his arms violently, holding in his hands the two leaf brooms.

continue to watch him carefully for two or three days, lest harm should result from his recent feast, and also because they think evil spirits are not unlikely to do him some injury by taking advantage of his supposed helpless condition to make him deaf, or cause him to forget his way, and thus meet the fate which, on the faith of their traditions, they believe to have overtaken two of their antediluvian ancestors.<sup>1</sup>

6. All that has been said of youths in respect to the *yá·dī-gū·mul-* applies equally to young women, except that matrons remove the novice's ornaments, and all but one or two of her *bōd'-s* (waistbelts<sup>2</sup>), and her *ō·bunga-* (leaf apron<sup>3</sup>), which are left for the sake of decency. As, while performing the concluding dance, some difficulty is experienced in regard to the *ō·bunga-*, girls are provided on these occasions with a more substantial apron of leaves, so that the feelings of the most prudish are not violated.

7. The origin of the term *gū·mul-lē·ke* is obscure, and inquiries have failed to elicit any satisfactory explanation regarding it; the literal translation is "rainy monsoon devour-does," and though the *yá·dī-gū·mul-* is always celebrated at that season of the year, the term is also applied to the honey feast, which can only take place during the dry months. The same equivalents are found in the other tribal dialects, so that the peculiarity is not confined to the *bō·jig-ngī·ji-*. The only reasonable explanation offered is that the expression is in allusion to the sweaty (*gū·mar-*), or rain-like (*yūm-*), appearance of the novice when the melted fat or honey has been poured and smeared over his person.

8. Lengthened intercourse with the alien population in their midst has naturally led to their occasionally betraying some indifference in regard to customs, such as that above described; especially is this the case with those who have been brought up in the orphanage at Ross Island. A few years ago one of these youngsters, who had been named Martin, refused to accede to the wishes of his friends in the jungle home to which he had returned, and persisted in partaking of the articles of food proscribed to all of his age; as he happened shortly after to fall sick and die, they were fully persuaded that he had incurred his fate by failing to comply with the ancient rites and ceremonies as handed down by their fathers.

9. On the conclusion of the *yá·dī-gū·mul-*, the youth is said to be an *ā·kā-gū·mul-*, and, as before stated, is addressed as *gū·ma*; but this is not the case with the girl, possibly because she, at

<sup>1</sup> *Vide post* "Mythology," paragraph 25.

<sup>2</sup> *Vide* Appendix B, item 25.

<sup>3</sup> *Vide* Appendix B, item 79.

this period of her life, receives a "flower" name,<sup>1</sup> and does not, therefore, require any additional designation to denote that she has attained maturity. If more than one become *gūma* on the same day they call each other *gūma l'arjopinga*.<sup>2</sup> After the *yā-dī-gūmul*-turtles' eggs and the kidney-fat of the ray-fish and turtle may, at the bidding of the chief, be again eaten by the novice, and in the first ensuing dry season edible roots, and the heart of the *Caryota sobolifera*, may be added to the bill of fare without further ceremony than the observance of strict silence on the first occasion of partaking of them.

10. Between the *yā-dī-gūmul*- and the *āja-gūmul*- no fruit may be eaten by the novices, who have, moreover, to abstain till after the *reg-jū-ri-gūmul*- from pig's flesh of any kind.

11. When the honey fast is to be broken a quantity of honey-combs, according to the number assembled, are on the appointed day procured: the *āka-yāb*- being placed in the midst of the group, the chief or other elder goes to him with a large honey-comb wrapped in leaves; after helping the novice to a large mouthful, which he does by means of a bamboo or iron knife, he presents the remainder to him, and then leaves him to devour it in silence: this he does, not, however, by the ordinary method, for it is an essential part of the ceremony that he should not use his fingers to break off pieces, but eat it bear-fashion, by holding the comb up to his mouth and attacking it with his teeth and lips.<sup>3</sup> After satisfying his present requirements, he wraps what is left of the comb in leaves for later consumption.

12. The chief then takes another comb and anoints the youth by squeezing it over his head, rubbing the honey well into his body as it trickles down. The proceedings at this stage are interrupted by a bath, in order to remove all traces of the honey, which would otherwise be a source of considerable inconvenience by attracting ants. Beyond the observance of silence, and continued abstinence from *reg-jū-ri*-, the youth is under no special restrictions, being able to eat, drink, and sleep as much as he pleases.

13. Early the following morning the lad decorates himself with leaves of a species of *Alpinia*, called *jū-ni*-,<sup>4</sup> and then, in the presence of his friends, goes into the sea (or, if he be an *ērem-tāga*-, into a creek) up to his waist, where, locking his thumbs

<sup>1</sup> Vide ante "Proper Names," paragraph 3.

<sup>2</sup> *arjō pike*, to share, or to be a partner with another.

<sup>3</sup> This mode of eating is termed *pai'ke* (to use the lips), from *pai*-, the lip.

<sup>4</sup> This plant is selected because it is associated with honey-gathering; its bitter sap, being extremely obnoxious to bees, is smeared over their persons when taking a comb, and enables them to escape scot free with their prize (vide post "Food," paragraph 35).

together, with open hands he splashes as much water as possible over himself and the bystanders, occasionally ducking his head under the surface as well. This is considered a safeguard or charm against snakes, and the on-lookers cry "*ô-to-ped-ike, kî-nig wá-ra-jô-bo lô-tike* (Go and splash yourself, or *Wá-ra-jô-bo*<sup>1</sup> will get inside you), for they imagine that unless they go through this splashing performance, this snake will by some means enter their stomachs and so cause death.

14. The only difference between the sexes with respect to the *â-ja-gû-mul*- is that with females it cannot take place until after the birth of the first child; they are also required to abstain from honey during each subsequent pregnancy; in their case, too, a chief or elder (preferably a relative) officiates, and not a woman.

15. A year is generally allowed to elapse between the *yâ-dî-gû-mul*- and the *reg-jî-ri-gû-mul*-. When this final step is determined on, the friends and relatives of the *â-kâ-yâ-b*- start on a pig hunt, and, if unsuccessful, the *gû-mul*- has to be postponed, for, in the case of a young man, it is necessary that the ceremony be performed with a boar, while for females a sow must be procured.

16. When all is ready, and the party assembled, the chief presses the carcass of the boar heavily on the shoulders, back, and limbs of the young man as he sits on the ground,<sup>2</sup> silent and motionless, this is in token of his hereafter becoming, or proving himself to be, courageous and strong. The animal is then cut up, and when the fat has been melted, as in the previous cases, it is poured over the novice, and rubbed into his person; he is then fed with *reg-jî-ri*-, and if he makes signs for water it is given him, but, until the following day, he may not utter a word, rise, or even sleep. Two or three friends generally remain with him to attend to his requirements, which he makes known to them by gestures.

17. In the morning fresh leaves of a tree called *reg lâ-kâ chàl*-—the fruit of which is much eaten by the *Sus And.*—are brought, and a quantity of them are placed in the hands of the youth, and some more in his waistbelt; he then rises and, as at the turtle feast, dances until fairly exhausted. During the month following the *reg-jî-ri-gû-mul*-, the young persons are called *â-kâ-gô-i*-.

18. It should be added that, whatever may have been the intention and practice in former years, it is not necessary at the present day for a youth to undergo these several ordeals before

<sup>1</sup> This is believed to be the *Ophiophagus elaps*.

<sup>2</sup> In the case of the woman, the carcass of the sow is not pressed in this manner on her limbs or body.



he is permitted to marry:<sup>1</sup> although many remain single until they have undergone these various rites, it is considered almost as binding on those who marry, before doing so, to comply with these time-honoured usages at some early opportunity.

**Marriage.**—1. It has been asserted that the “communal marriage,”<sup>2</sup> system prevails among them, and that “marriage is nothing more than taking a female slave,”<sup>3</sup> but so far from the contract being regarded as a merely temporary arrangement, to be set aside at the will of either party, no incompatibility of temper or other cause is allowed to dissolve the union, and, while bigamy, polygamy, polyandry, and divorce are unknown, conjugal fidelity till death is not the exception, but the rule, and matrimonial differences, which, however, occur but rarely, are easily settled with or without the intervention of friends.

2. It is undoubtedly true that breaches of morality have occasionally taken place among a few of the married persons who have resided for any length of time at Port Blair, but this is only what might be expected from constant association with the Indian convict attendants at the various homes; justice, however, demands that in judging of their moral characteristics we should consider those only who have been uninfluenced by the vices or virtues of alien races.

3. As in various other savage tribes, unchastity<sup>4</sup> is apparently universal among the unmarried of both sexes, and is indeed so entirely disregarded that no reproof is administered, even by the nearest relatives, to those who offend in this manner; notwithstanding this laxity, the girls are strikingly modest and child-like in their demeanour, and when married are good wives and models of constancy, while their husbands do not fall far short of them in this respect. It should, however, be mentioned that the freedom which exists between the sexes prior to wedlock, is confined to those who are not within the prescribed limits of affinity, as their customs do not permit of the union of any who are known to be even distantly related;<sup>5</sup> the fact of our allowing first cousins to marry seems to them highly objection-

<sup>1</sup> They think highly of a man who defers marriage until he is of full age, and the reverse of a youngster who rushes into matrimony before attaining the mature (!) age of eighteen.

<sup>2</sup> “So absolutely closely allied are the Andaman Islanders in their moral as well as physical life to the lower animals, that it is said by an eminent scientific voyager (Sir Edward Belcher) that the man and woman remain together until the mother ceases to suckle the child, after which they separate as a matter of course, and each seeks a new partner” (Brown).

<sup>3</sup> *Vide* Wood.

<sup>4</sup> “A great many races of mankind are quite indifferent to juvenile unchastity, and only impose strict conduct on their women after marriage” (Peschel).

<sup>5</sup> “It is precisely nations in the most primitive stage which have the greatest abhorrence of incestuous marriages” (Peschel).

able and immoral, which is turning the tables on us with a vengeance.<sup>1</sup>

4. In consequence of the lax code of morality prevailing among the unmarried, it not unfrequently happens that a marriage is brought about by the circumstance of the young woman being found *enceinte*. When this is the case, the guardians ascertain from her companions or herself who is the cause of her being in such a condition, and, whether it is an easy matter or not to decide this question with certainty, there never appears to be any difficulty in persuading the youth whom she names as her lover to become her husband. It thus happens that children are very rarely born out of wedlock.

5. Parents and foster-parents have the power of betrothing their children in infancy, and though subsequently, during childhood, they may be parted, the contract must be fulfilled soon after they attain a marriageable age; it is even alleged that, like the Yorubas,<sup>2</sup> the Andamanese look upon a girl betrothed by her parents as so far a wife that with her pre-matrimonial unfaithfulness is accounted a crime.

6. As soon as the betrothal has been agreed upon, the girl is taken to the hut of her future father-in-law, or foster father-in-law, and the children remain together for several months, in order that the fact of their engagement may become generally known; after this the girl returns to her old home, or is adopted by one of her father's friends. Should either of the betrothed pair die young, the survivor is not called upon to take any part at the obsequies, and is at liberty to form another alliance.

7. Until a man attains middle age he evinces great shyness in the presence of the wife of a *younger* brother or cousin, and the feeling is invariably reciprocated; it is, however, otherwise in the case of the elder brother's (or cousin's) wife, who, moreover, should she be many years his senior, receives from him much of the respect accorded to a mother. In the first of the above cases all communications are made through a third person, though under no circumstances would marriage be permissible between them; while in the latter it is almost obligatory, unless the disparity between the ages be very great.

8. It is not customary for lovers to intimate their desire of being married, but it is the duty of the guardian, or, in the case of widows and widowers, of the chief of the community, to

<sup>1</sup> On reference to Appendix I, it will be found that the terms which are used to denote *half-brother* and *half-sister*, are also employed to denote *male* and *female cousins*, showing how close they regard the relationship.

<sup>2</sup> Farrer's "Primitive Manners and Customs," p. 201.



arrange matters for those between whom he observes there is something more than a passing attachment.

9. Although nearly all marriages are brought about by one or other of the above-mentioned modes, it remains to be added that an individual is now and then met with who is regarded as married though he (or she) has not conformed with the prescribed ceremony; this occurs when a bachelor or widower is found asleep in one of the huts occupied by unmarried females; he and the woman beside whom he was seen are then said to be *tigwānga*-, which means that their union has been contracted irregularly. In such cases no ceremony or entertainment takes place, for a certain amount of discredit attaches to a couple thus united; but if their after conduct towards each other be considered satisfactory no unpleasant allusions are made to the past.

10. As they have no idea of invoking the aid or blessing of a Supreme Being, nothing of a religious character attaches itself to the marriage ceremony, which may be briefly described as follows:—On the evening of the eventful day<sup>1</sup> the bridal party assemble at the chief's hut or in one of those occupied by unmarried women. The bride (whether spinster or widow) sits apart, attended by one or two matrons, and the bridegroom takes his place among the bachelors until the chief or elder approaches him, whereupon he at once assumes a modest demeanour and simulates reluctance to move; however, after a few encouraging and re-assuring remarks he allows himself to be led slowly, sometimes almost dragged, towards his *fiancée*, who, if she be young, generally indulges in a great display of modesty, weeping and hiding her face, while her female attendants prepare her by straightening her legs; the bridegroom is then made to sit on her thighs, and torches are lighted and brought close to the pair that all present may bear witness to the ceremony having been carried out in the orthodox manner, after which the chief pronounces them duly married, and they are then at liberty to retire to the hut which has been previously prepared for their occupation.

11. Unless they have made arrangements to settle<sup>2</sup> elsewhere,

<sup>1</sup> I can find nothing to account for the statement, which appeared in Dr. Day's paper, to the effect that they "pass their marriage day staring at one another."

<sup>2</sup> From the fact that, sometimes from choice, and sometimes in compliance with the wishes of the bride—should she belong to another tribe—they settle down in another community, it has been inferred in Dr. Day's account that it is customary to spend the honeymoon away from their friends, but such is not the case. The same writer further states that "on the bridegroom's return to the tribe with his bride, *Jeedgo*, crying and dancing are kept up with great spirit." The word here intended is evidently *abjad-i-jūg*-, but it means *spinster*, the word for *bride* being *abdē-rehīl-pail*-.

the newly married couple do not leave the encampment in order to get food, or anything else that they may require, as the friends consider it a duty or privilege to supply all their needs until the shyness, consequent on the marriage, has worn off.

12. Wedding presents being as much *de rigueur* among these savages as in Mayfair, the happy pair invariably find themselves enriched by their relatives and acquaintances with the various articles of ordinary use, such as nets, buckets, bows, arrows, &c., in honour of the event.

13. On the morning following the marriage the bridegroom's mother, or other near female relative, decorates his person by painting him with *tá-la-ōg-*, while the bride is similarly ornamented by her friends. It often happens that a young couple will pass several days after their nuptials without exchanging a single word, and to such an extent do they carry their bashfulness that they even avoid looking at each other: in fact their conduct would lead a stranger to suppose that some serious quarrel had caused an estrangement.

14. When a few days have elapsed, and they are in some measure accustomed to the novelty of their position, they enter upon the duties of life, and conduct themselves like their neighbours: the marriage is then celebrated by a dance, in which all, save the bride and bridegroom, take part.

15. A certain amount of jealousy usually exists between young people during the first year of their married life<sup>1</sup>; indeed, complete confidence and genuine affection are never entirely established until they become parents or, at least, till the wife is found to be *enceinte*, and even their relationship to each other is not regarded as being so close *prior* to the birth of a child as it is *after* that event. Confirmatory evidence on this point will be given when describing the funeral rites,<sup>2</sup> where it will be noticed that the survivor of a childless couple is not looked upon as chief mourner.

16. There is no prohibition against second marriages, but greater respect is entertained for those who show their love and esteem for the deceased by remaining single and leading chaste lives (*ō-yūn-tē-mar-bar-minga-*). It is by no means unusual for a man, even though he be young at the time of his wife's death, to remain a widower<sup>3</sup> for her sake for many years, or even till death;

<sup>1</sup> It often happens that a man will not at first allow his wife to leave their hut at night for any purpose unless he accompanies her, professedly to protect her from dangers, spiritual and temporal, but in reality to satisfy himself that she has not made an assignation.

<sup>2</sup> *Vide* "Death and Burial," paragraph 20.

<sup>3</sup> It must, however, be admitted that as their customs allow of a widow or widower consorting with the unmarried of the opposite sex, a single life is not of necessity a virtuous one, or evidence of constancy and devotion to the memory of the dear departed.

but widows generally marry again when the prescribed term has passed : this is not altogether due to inconstancy on the part of the fair (!) sex, but to the custom, to which allusion has before been made, which all but compels a bachelor or widower to propose to the childless widow of his elder brother or cousin (if she be not past her prime),<sup>1</sup> while she has no choice beyond remaining single or accepting him ; should she have no younger brother-in-law (or cousin by marriage), however, she is free to wed whom she will.<sup>2</sup>

17. A young widow who is childless usually returns to the home of her girlhood, but, if elderly, she lives in one of the huts set apart for spinsters, and those who, situated like herself, are eligible for matrimony ; during the period of her widowhood it devolves on one of her senior male relatives to act as her guardian ; it is not considered decorous that any fresh alliance should be contracted until about a year has elapsed from the date of bereavement.

18. In the case of a widow who has children, it is customary for her to remain in the same community and keep house for her family ; during widowhood—if her husband had been a chief or elder—she continues to enjoy the privileges accorded her in his lifetime. Should she re-marry and her husband happen to be a bachelor, or widower “without encumbrances,” it is usual for him to join her community, and live in her hut, but if they both have families it becomes a matter of arrangement between them which establishment shall be given up.

19. Some idea of the erroneous views formerly held respecting their marital relations will be gathered from the following extracts :—(a) “There is promiscuous intercourse save with the parent which only ceases in regard to the woman when she is allotted as wife to a man, but is retained as the prerogative of the male sex.”<sup>3</sup> (b) “Marriage, as we understand the word, is unknown to them, and there seem to be few restrictions of consanguinity, a mother and her daughter being sometimes the wives of the same husband.”<sup>4</sup> A similar statement appears in Dr. Brown’s work, and the source of both is probably to be found in the following passage in Dr. Mouat’s book, in which he publishes several extraordinary stories told by an escaped

<sup>1</sup> It should be added that marriage with a deceased wife’s younger sister is equally a matter of necessity on the part of a *childless* widower.

<sup>2</sup> A case of this kind came under my notice where a young man living at one of the homes was reluctantly married to the widow of an elder brother, or cousin, who was considerably his senior, and innocent of any attractions. This *mariage de convenance* proved by no means a happy one, though, so far as could be judged, neither had any just cause of complaint against the other.

<sup>3</sup> *Vide* Mouat.

<sup>4</sup> *Vide* Wood.

convict Sepoy, named *Dudhnáth*,<sup>1</sup> who had apparently spent about thirteen months with the aborigines, during the first two years of our settlement at Port Blair (1858-59):—"A man named *Pooteeah*, who doubtless considered him (*Dudhnáth*) a desirable match, offered to bestow upon him, in what they called wedlock, his daughter *Hessa*, a young woman of twenty years of age, whose attractions were doubtless regarded as considerable among her native tribe, and a mere girl named *Zigah*, a daughter of *Hessa*, who, in that eastern part of the world, was considered quite old enough<sup>2</sup> for the state of marriage. As they were by no means troubled with an uneasy amount of virtue they made no objection to being assigned to the Brahmin soldier in the most uncereemonious manner. The two, mother and daughter, at once recognised him as their husband."

20. The main feature of interest in this story is, however, somewhat marred when it is discovered that the woman (*Līpa*<sup>3</sup>), who was well known to us for many years subsequent to the establishment of the homes, was a girl of not more than seventeen at the time of *Dudhnáth*'s escape, and that she had never been a mother prior to her marriage with him.<sup>4</sup> The child (*yē'ga*, not *Zigah*) was merely living under *Līpa*'s protection, and was employed, like all children, in helping to supply the wants of her guardians. The fact of child marriages—not to mention bigamy and concubinage—being quite unknown among them, affords additional support to this statement, which is the result of careful inquiry.

21. *Dudhnáth* being of course aware of the ignorance which prevailed at the time regarding the habits and customs of the Andamanese, appears to have availed himself of the opportunity thus afforded him of drawing largely on his imagination, probably with the object of exciting as much interest as possible in his adventures, and perhaps also of amusing himself with the wonder created by his narrative. Some of his unrecorded<sup>5</sup> stories seem, however, to have been still more

<sup>1</sup> Of all who absconded on this occasion it appears that he was so fortunate as to be the only one who was spared by the aborigines, his companions being shot down as soon as they were discovered.

<sup>2</sup> *Vide ante*, "Development and Decay," paragraph 3, and "Reproduction," paragraph 1.

<sup>3</sup> This was her name. There is no name at all resembling *Hessa* in the language (*vide* Appendix H).

<sup>4</sup> In his report for the month of December, 1866, the officer in charge of the Andaman homes stated that on *Dudhnáth*'s desertion of her "she was called *Modo*, which signifies a deserted bride, or a woman that has lost her husband while young, and before becoming a mother." [N.B.—*mū-da* (not *Modo*) is one of the twelve "flower" names borne by all young women (married and single) until they become mothers (*vide* "Proper Names," paragraph 3, and Appendix H.)]

<sup>5</sup> "Our friend the Sepoy tells some remarkable exploits of the Mincopie in

highly coloured, and failed, therefore, in imposing on the almost excusable credulity which existed at a time when next to nothing of a trustworthy nature was known concerning these savages.

22. With regard to a deceased husband's property, the widow disposes of everything, which she does not require for her personal use, among his male relatives.

23. It seems superfluous to add that no such custom as *suttee* prevails or has ever been known to exist among them.

**Death and Burial.**—1. Amongst other erroneous opinions held regarding these tribes is that which declares that "no lamentation is publicly made at death," whereas, in point of fact, the demonstrations of grief on such occasions are generally excessive, and are shared, in a greater or less degree, by every member of the community in which the melancholy event occurs.

2. In the case of an infant, the parents and relatives remain weeping for hours beside the corpse; afterwards they smear their persons with a wash composed of *ōg-* (the common olive-coloured clay) and water, and, after shaving their heads, place a lump of the same, called *del'a-*, just above their foreheads<sup>1</sup> where it hardens and is left, much to the individual's discomfort, until the expiration of the days of mourning<sup>2</sup>; should it fall off in the meantime it is renewed.

3. The burial usually takes place within 18 hours of the decease, which time is spent by the mother in painting the head, neck, wrists, and knees of her dead child with *kōi-ob-* and *tā-la-ōg-*; she also shaves off the hair, and folds the little limbs so as to occupy the least possible space,<sup>3</sup> the knees being brought up to the chin and the fists close to the shoulders; the body is then enveloped in large leaves, called *kā'pa-*<sup>4</sup>, which are secured with cords or strips of cane. The father meantime employs himself in digging a grave with an adze (*wō-lo-*<sup>5</sup>), in the place where his hut fire usually burns; when all is prepared the little head is uncovered, and the parents gently blow upon the face

flashing, which, as they seem to indicate a Munchausen-like facility of exaggeration in the narrator we decline to repeat" (Mouat).

<sup>1</sup> This applies to men, for women usually place the *del'a-* on the top of the head. It is worn by neither sex until after they have attained maturity, and only for a father, mother, husband, wife, brother, sister, son, or daughter, the *ōg-* wash alone being deemed sufficient "mourning" in the case of other relatives or friends.

<sup>2</sup> The term *ā-kā-ōg-* is therefore applied to mourners, since they are prohibited from the use of *kōi-ob-*.

<sup>3</sup> "If we knew no further details as to the opinions of the intellectually gifted Hottentots, formerly so greatly underrated, it would be enough that, previous to burial, they place the body of the deceased in the same position which it once occupied as an embryo in the mother's womb" (Peschel).

<sup>4</sup> *Vide* Appendix B, item 74.

<sup>5</sup> *Vide* Appendix B, item 15.

two or three times in token of farewell;<sup>1</sup> then, replacing the leaves, they put the corpse into the grave in a sitting posture, and fill in and level the earth; next, having procured a quantity of the young leaves of the common jungle cane, they split them and make long fringe-like wreaths, called *ára*,<sup>2</sup> which they fasten to the trees surrounding the hut, or encircling the entire camping ground, the object being to apprise any stranger or friend who might chance to visit the spot, that a death has recently occurred, and that they would therefore do well to keep away.

4. After suspending the *ára* the fire is rekindled and the mother places a shell containing some of her own milk beside the grave, obviously in order that the child's spirit, which is believed to haunt its late home for a few days, may not lack nourishment. All in the encampment then pack up those things which are mostly needed and depart to some other camping ground,<sup>3</sup> generally not less than two or three miles distant, where they at once construct huts, usually of the description called *chàng-tó-rnga*,<sup>4</sup> to serve as shelter during the mourning period, which as a rule lasts about three months; and during which the parents and relatives, naturally enough, refrain from taking any part in the festivities occurring among their neighbours. While mourning it is customary for the *ê-rem-tá-ga* to abstain from pork, and for the *àryô-to* to deny themselves turtle as well as other luxuries, in token of the sincerity of their grief, but they never mutilate themselves by cutting off joints of their fingers, &c., as do the Hottentots and the Papuans of the Fiji Islands, nor have they, as has been erroneously asserted in Dr. Day's paper, daily, during periods of deep sorrow, to throw honey-comb, if obtainable, into the fire.<sup>5</sup>

5. At the expiration of the time mutually agreed upon, they all return to the deserted encampment and remove and destroy the *ára*. The parents then exhume the remains, which are taken by the father to the sea-shore, or the nearest creek, there to be cleansed<sup>6</sup> from all putrefying matter: this done, he brings

<sup>1</sup> *Vide* ceremony at parting (*post* "Meeting and Parting," paragraph 6).

<sup>2</sup> *Vide* Appendix B, item 73.

<sup>3</sup> Similarly do the Koi-Koin (Hottentots) "break up their kraals after every case of death, to avoid the proximity of the grave" (Peschel).

<sup>4</sup> *Vide* "Journ. Anthropol. Inst.," vol. xi, p. 283, and *ante* "Habitations," paragraph 3.

<sup>5</sup> The practice here referred to is evidently that of burning beeswax (not honey-comb), the object of which will shortly be explained under "Superstitions," paragraph 13, and is not that here stated.

<sup>6</sup> This repulsive duty is always performed by one of the near *male* relatives of a deceased person. Dr. Day was led to believe that "the extraction of the skull and bones, it is considered, requires great skill and courage," but experience and the statements of all those aborigines who have been questioned on the subject, do not bear out this view.



the skull and bones back to his hut and breaks up the latter into small pieces suitable for necklaces.<sup>1</sup> The mother, after painting the skull with *kòròb*-, and decorating it with small shells attached to pieces of string, hangs it round her neck with a netted chain, called *ràb*-.<sup>2</sup> After the first few days her husband often relieves her by wearing it himself. Infants' skulls, being fragile, are generally preserved carefully from risk of injury by being entirely covered with string, but (except temporarily as when travelling, fishing, &c.) these souvenirs are not carried about in a basket. The next few days are spent by the mother in converting the bones into necklaces, called *chàw-ga-tâ*-, and when several have been made, she and her husband pay visits to their friends, among whom they distribute these mementoes, together with any of the pieces that may remain over, in order that they may make additional necklets for themselves.

6. Before this distribution takes place, it should be mentioned that the mourners remove from their heads the lump of clay placed there on the day of the child's death; the wife also paints her husband's neck, waist, wrists, and knees with *kòròb*- and further adorns him with a stripe of the same compound from his throat to his navel, and afterwards decorates herself in a similar manner.

7. All due preparations having thus been made, the friends assemble round the hut to pay their final visit of condolence; whereupon the bereaved father sings some old song of his, which he last sang, perchance, with his little one alive and well in his arms, on which all except himself express their grief and sympathy by breaking out into loud lamentations. The chorus of the song is chanted by the women while the parents perform a dance which goes by the name of *t'i-tò-latnga*- (*lit.*, the shedding of tears); when wearied with their exertions they retire to their hut, and cease from any further display of sorrow, whereupon their friends generally take up and continue the melancholy dance and song for many hours, the women being then joined by the men, who, till this stage of the proceedings, have merely acted the part of spectators. It should be explained that the character of this dance does not differ from that which is customary at a wedding or other occasion of rejoicing, except in the doleful appearance of the performers.

8. On the death of an adult and others, the relatives (as in the case of an infant) smear themselves with *ōg*- and place a lump of the clay on their heads, where it must remain until the *t'i-tò-latnga*-; any necklaces, waistbelts, &c., which the deceased was wearing are removed; women then paint the

<sup>1</sup> *Vide* Appendix B, item 44.

<sup>2</sup> *Vide* Appendix B, item 42.

corpse, whose limbs are folded and enwrapped in the manner above described.

9. What the true significance of this practice may be is not quite clear, as such of the aborigines as have been questioned assert that it is merely for convenience in removal; but since the custom is also observed in infant burials which, as I have mentioned, take place in the very hut wherein the death occurred, it seems probable that a deeper meaning underlies the act; and the real reason may be that which Peschel supplies in his reference to the Hottentots who observe the same custom, *i.e.* "that the dead will mature in the darkness of the earth in preparation for a new birth."<sup>1</sup>

10. As it is not customary for females to attend the funeral, when *their* part is done, they gently blow upon the face, and take their last farewell look.

11. None save infants are buried within the encampment, all others being carried to some distant and secluded spot in the jungle, and there interred or placed upon a "*machán*," or platform; it is generally arranged beforehand whether of these two methods shall be employed, but the latter is considered the more complimentary, apparently because it involves a little more labour.<sup>2</sup>

12. Arrived at their destination, the corpse, which has been carried by one of the men on his back, is put down, while the final preparations are being made. A spot is selected where there is a boulder or large tree,<sup>3</sup> to mark it, and there, if a grave has been decided on, they dig a hole about 4 or 5 feet deep, with an adze (*wō-lo-*), into which the body is lowered in a sitting posture, facing the east; all present then raise the leaf covering the head, and take leave of their friend by blowing upon his face. Before the grave is filled in the cords or canes are cut, the object being to hasten the process of decomposition by loosening the leaves; a fire is lighted over the spot and a *gōb*,<sup>4</sup> or nautilus shell, filled with water, as well as some article which belonged to the deceased, is placed beside it: then the surrounding brushwood for some little distance is cleared away, and *á-ra-* are suspended between the trees in the manner and for the purpose before stated.

13. Should it, however, have been determined to dispose of the corpse by the alternative method, a small stage is constructed

<sup>1</sup> This singular practice also prevailed amongst the ancient Peruvians (*vide* "Anthropology of Prehistoric Peru," by T. J. Hutchinson, "Journ. Anthropol. Inst." vol. iv, p. 447, 1875).

<sup>2</sup> Old persons are generally buried.

<sup>3</sup> They never wittingly use the same tree or spot a second time, and are careful to remember those which served on a former occasion.

<sup>4</sup> *Vide* Appendix B, item 82, and "Journ. Anthropol. Inst.," vol. xi, p. 269.



of sticks and boughs, about 8 to 12 feet above the ground, generally between the forked branches of some large tree,<sup>1</sup> and to it the body is lashed. The head is raised slightly, looking eastward, and, though the position of the arms is not altered, the cords are loosened to allow of the legs being straightened, after which the leaves are re-adjusted, so as to cover the entire form, in order to protect it from the attacks of hawks, crows, and vermin.

14. Two reasons are given for the practice of placing the corpse with the face towards the rising sun: one being that dissolution may thereby be hastened, the other that *jereg*- or Hades, whither the souls of the departed flee, is situated in the east.

15. The mourners take a last farewell in the manner before described, and fulfil the remaining duties, as related in the former case. The spirit of the deceased being supposed to haunt not only the spot where he has been buried, but also the encampment where the death occurred, the community migrate temporarily to another camping ground immediately after the return of the funeral party, leaving the *á-ra*- to witness to casual visitors of the cause of their absence.

16. When the period of mourning has expired the men who assisted in the funeral rites return to the place of burial, destroy the *á-ra*-, and remove the remains of the deceased to the sea-shore, or to a creek, where the bones are cleaned and afterwards conveyed to the old encampment, whither they all return and restore their camp to its normal condition.

17. As all that has been related regarding the distribution of the bones of a child and the subsequent dance applies equally to all cases, further account of these ceremonies here is unnecessary; for fuller information anent the manufacture of the necklaces, &c., I would refer you to the interesting paper by Dr. Allen Thomson, F.R.S., read before this Institute by the author in May last.<sup>2</sup>

18. Although in the majority of cases the display of grief is thoroughly sincere, there is no doubt that they hope, by testifying to their sorrow in the various ways mentioned, to conciliate the spirits of the departed, and to be by them preserved from many misfortunes which might otherwise befall them.<sup>3</sup>

19. In the case of a young married couple who are childless, if either die, the survivor is not the chief mourner, and does not even assist at the obsequies, which are performed solely by

<sup>1</sup> They are careful not to select a fruit-tree, or one used for the manufacture of their canoes, bows, and other implements.

<sup>2</sup> *Vide* vol. xi, p. 295.

<sup>3</sup> *Vide post* "Religious Beliefs," &c., paragraph 24.

the relatives of the deceased, one of whom subsequently takes possession of the skull, and wears it until he (or she) chooses to part with it, or is asked to do so by another member of the family. It should here be stated that it is by no means obligatory upon the survivor of an elderly couple, or any relative, to carry the bones or skull of the deceased for a lengthened period:<sup>1</sup> except in the event of marrying a brother, sister, or cousin of the deceased, these relics can be given at any time to a friend who may ask for them; thus it not unfrequently happens that the remains of one who was a chief or a favourite in his day, are scattered far and wide among his admirers, but when in course of time they get mislaid or broken, the owner is often easily reconciled to his loss, or makes it good by procuring similar mementoes of another and more recently departed friend.

20. It may be said that as a rule no adult is without at least one *chàw-ga-tá-* (i.e., a human bone necklace), and the skulls, which are generally to be found in every encampment, are worn by each in turn, if only for a few hours.

21. The only difference made on the occasion of the death of a chief, his wife, or one of his near relatives, is that *all* the men and lads of the encampment smear themselves with *ōg-*, and attend the funeral; the relations alone, however, are the mourners during the succeeding weeks or months which intervene before the *tī-tō-latnga-*, though, as a token of respect for the deceased, and of sympathy with the mourners, other members of the tribe often abstain from some favourite article of food, and take no part in festivities during the same period.

22. If a member of another tribe happen to die while on a visit, the body would be disposed of in one of the modes I have endeavoured to describe, after which intimation would be sent to the friends of the deceased, so that they might know where to seek for the skeleton when the time for disinterment should arrive.

23. The body of an enemy, stranger, or captive child would be thrown into the sea, or buried *sans cérémonie*, as the bones would never be in request.

24. A sudden death is at once attributed to the malign influence of *ērem-chàw-gala*, if the deceased had been recently in the jungles, or to *jū-ru-win-*, if he had been on the sea; in either case one of the male relatives of the victim, representing the feelings of the community, approaches the spot where the body

<sup>1</sup> I mention this more especially as the erroneous statement made by some early writer, that "a widow wears her husband's skull suspended round her neck for the rest of her life," has been repeated in more recent accounts, and hitherto remains uncontradicted.

is lying, and shoots several arrows in rapid succession into the surrounding jungle, only taking care to avoid injury to the bystanders, and then, seizing a pig-spear, *ēr-dūtnga*,<sup>1</sup> if *ērem-chàw-gala* be the demon suspected, or a turtle-spear, *kowai'a l'oko dūtnga*,<sup>2</sup> if it be *jūru-win*- who is accounted guilty, he pierces the ground all round the corpse, hoping thereby to inflict a mortal injury upon the unseen enemy; while so engaged he vents his grief and indignation in no measured terms of imprecation.

25. When a death which is attributed to *ērem-chàw-gala*'s malignity occurs so late in the day that the burial has to be deferred till the following morning, those who are not mourners sing in turns throughout the night, in the belief that this demon will thus be deterred from doing any further harm in the encampment.

26. At death they say that *ērem-chàw-gala* and his sons feast upon the blood and soft tissues of all who die on land, and that their leavings, excepting of course the bones, are disposed of by worms, *wēn*-, but *jūru-win*- is supposed to consume every portion of those who fall into his clutches.

**Meeting and Parting.**—1. Contrary to the customs of most races, no salutations<sup>3</sup> pass between friends, even after a more or less lengthened separation, such as rubbing noses, kissing,<sup>4</sup> shaking hands, &c.; but on meeting they remain silently gazing at each other for, in our eyes, an absurdly long time—unless of course one or both be hurried; the younger then makes some commonplace remark which apparently has the effect of loosening their tongues, for they at once commence hearing and telling the news.<sup>5</sup>

2. Relatives, after an absence of a few weeks or months, testify their joy at meeting by sitting with their arms round each other's necks,<sup>6</sup> and weeping and howling<sup>7</sup> in a manner which would lead a stranger to suppose that some great sorrow had befallen them; and, in point of fact, there is no difference observable between their demonstrations of joy on these occasions and those of grief at the death of one of their

<sup>1</sup> Vide Appendix B, item 9.

<sup>2</sup> Vide Appendix B, item 10.

<sup>3</sup> Vide Colebrooke and Anderson.

<sup>4</sup> Kisses are considered indicative of affection, but are only bestowed on infants.

<sup>5</sup> One might imagine that the writer of the article entitled "Chippers of Flint," which appeared in "Cornhill" (vol. xli, p. 200), had heard of or witnessed a rencontre of this description, but had not watched its progress, or he would not have spoken of this race as "all but speechless."

<sup>6</sup> Vide Plate IX, fig. 2.

<sup>7</sup> This custom resembles that which exists among New Zealanders under the name of the *Tangi*.

number. The crying chorus is started by women, but the men speedily chime in, and groups of three or four may thus be seen weeping in concert until, from sheer exhaustion, they are compelled to desist; then, if neither of the parties are in mourning, a dance is got up, in which the females not unfrequently take part, but the style of their performance differs from that of the males.<sup>1</sup>

3. A husband who is *childless*, and has been absent from his home for some time, on his return to the encampment visits first a blood relation (if any), and when *they* have wept together he goes to his own hut, not in order to shed more tears, but to see and talk to his spouse. The same remark applies to a wife similarly circumstanced. But in the case of married couples who are *parents*, the meeting takes place first between them; the wife hangs round her husband's neck sobbing as if her heart would break with joy at their re-union; when she is exhausted with weeping, he leaves her, and, going to one of his relations, gives vent to his pent-up feelings of happiness by bursting into tears.

4. It is usual for friends at meeting to give each other something which may happen to be in their hands at the time, and these gifts are regarded as tokens of affection.

5. Strangers introduced by mutual friends are always warmly welcomed by the whole community: they, in common with all guests, are the first attended on, the best food in the encampment is set before them, and in every way they are well treated; presents also are often given them, especially when about to take their leave.

6. "Speed the parting guest" is an axiom upon which these people invariably act: the departing visitor is accompanied by his host to the landing-place, or, at all events, some distance on his way; when bidding each other farewell the guest takes the hand of his host and blows upon it; when the compliment has been returned, the following dialogue ensues:—

Departing visitor: *kam wai dōl*. I am off (*lit.*, Here indeed I).

Host: *ô, āchik wai òn; tain tâ'lik kach òn yá'te?* Very well, go; when will you come again?

Departing visitor: *ngá'tek dō ngat mīn ē'kke*. I will bring away something for you one of these days.

Host: *jō'bo la ngōng chá'pikok!* May no snake bite you!

Departing visitor: *wai dō ēr-gē'lepke*. I will take good care of that (*lit.*, I will be watchful).

Afterwards they again blow upon each other's hands, and part,

<sup>1</sup> *Vide post* "Games and Amusements," paragraphs 27 and 30.

shouting invitations and promises for a future date until beyond earshot.

7. When nearing home, after an unusually successful hunting or fishing expedition, the men raise a shout<sup>1</sup> of triumph in order to apprise their friends of their good fortune, and the women take up the cry and express their delight by yelling<sup>2</sup> and slapping their thighs; but when the encampment is entered, these sounds of rejoicing almost invariably cease for a while, and, after depositing their spoils, the hunters remain speechless for some time ere recounting their adventures and exploits: for this strange practice they appear unable to account.

8. No matutinal greetings pass between friends or between husband and wife, and inquiries relating to health are unusual unless addressed to an invalid.

9. When a man is thirsty and wishes also to wash his hands, he first, if alone, stoops down and drinks from the stream, or raises the water to his lips in a leaf or vessel; then, filling his mouth with water, he squirts it over his hands, using his unkempt locks as a towel. Should any one else be present, he would pour the water over his friend's hands as well, not from his mouth, but from a leaf.

10. They do not bathe daily, but at irregular intervals, when oppressed with the heat, or when, from some cause, as, for instance, in gathering honey,<sup>3</sup> their persons become sticky and unpleasant, and ablutions, consistently with comfort at least, cannot be dispensed with. It will be understood that these remarks apply to the *ēremtāga*-, rather than the *āryōto*-, who, from the nature of their pursuits, are on the whole fairly clean.<sup>4</sup>

11. During the hot weather they smear their bodies with common white clay, called *ōg*-,<sup>5</sup> dissolved in water, and avoid, as far as they are able, any lengthened exposure to the direct rays of the sun. If compelled to leave the shelter of the jungle, they are in the habit of holding a large leaf screen, *kāpa-jātnga*-,<sup>6</sup> over their heads as a protection (this is also done during a shower); should they be travelling by boat they lessen the discomfort caused by excessive heat by pouring water over themselves, or by plunging overboard and swimming alongside the canoe for some part of the way.

<sup>1</sup> There is a specific term for this description of shouting, viz.: *tēreblake*, while that of the women in answer thereto is called—

<sup>2</sup> *rōmoke*.

<sup>3</sup> *Vide* Appendix H (*lad'a chāu*, lit., dirty body).

<sup>4</sup> They never allow vermin to breed on their persons—in fact, such a thing could not possibly occur, owing to the constant shaving of the head, painting of the person, and, in the case of the *āryōto*-, immersion in the sea while fishing and turtling.

<sup>5</sup> *Vide* Appendix B, item 59.

<sup>6</sup> *Vide* Appendix B, item 74.

**Fire.**—1. It would seem that the Andamanese, like the quondam aborigines of Tasmania, have always been ignorant of the art of producing fire.

2. The assertion<sup>1</sup> that these tribes when first discovered, assuming that this refers to either the second or ninth century,<sup>2</sup> were ignorant of the use of fire may or may not be correct; but if any faith can be placed in the traditions held by them on the subject, their acquaintance with it dates from no later period than the Creation!<sup>3</sup>

3. The most satisfactory conjecture as to the source whence they first obtained fire appears to me to be based on the fact of there being two islands attached to the group, one of which (Barren Island) contains an active volcano, and the other (Narcondam Island<sup>4</sup>) a now extinct one.

4. Being strangers to any method of producing a flame, they naturally display much care and skill in the measures they adopt for avoiding such inconvenience as might be caused by the extinction of their fires.

5. Both when encamped and while journeying, the means employed are at once simple and effective. When they all leave an encampment with the intention of returning in a few days, besides taking with them one or more smouldering logs, wrapped in leaves if the weather be wet, they place a large burning log or faggot in some sheltered spot, where, owing to the character and condition of the wood invariably selected on these occasions, it smoulders for several days, and can be easily rekindled when required. Decayed pieces of the *Croton argyratus*, and two species of *Diospyros*,<sup>5</sup> and a fourth, called by them *chôr*-, but not yet identified, are chiefly used as fuel. As may be inferred, all labour of splitting and chopping is saved, as it is only necessary

<sup>1</sup> *Vide* Brown.

<sup>2</sup> *Vide* Part I (commencement).

<sup>3</sup> *Vide post* "Mythology," paragraphs 5 and 6.

<sup>4</sup> Regarding this island, which is sometimes shown as Narkandam, Colonel Yule, in his "Marco Polo," writes as follows:—

"Abraham Roger tells us that the Coromandel Brahmins used to say that the *Rakshasas*, or Demons had their abode 'on the Island of Andaman, lying on the route from Pulicat to Pegu,' and also that they were man-eaters. This would be very curious if it were a genuine old Brahminical *Saga*; but I fear it may have been gathered from the Arab seamen. Still it is remarkable that a strange weird-looking island, which rises, covered with forest, a steep and regular volcanic cone, straight out of the deep sea to the eastward of the Andaman group, bears the

name of *Narkandam* in which one cannot but recognise नरक, (*Narak*), 'Hell.'

Can it be that in old times, but still contemporary with Hindu navigation, this volcano was active, and that some Brahmin St. Brandon recognised in it the mouth of Hell, congenial to the *Rakshasas* of the adjacent group?"

Colonel Yule adds: "I cannot trace any probable meaning of Andam, yet it looks as if *Narak-andam* and *Andam-ân* were akin."

<sup>5</sup> Bastard ebony or marble wood.



to beat a log of this description on a stone or other hard substance a few times before it breaks up into as small pieces as are needed.

6. In each hut that is occupied there is invariably a fire, the object of which is to keep the owner warm, to drive away insects, and to cook food, while the smoke is useful in preserving the store of provisions, which are placed about two feet above it for that purpose.<sup>1</sup>

7. Council fires, or fires burnt on special occasions, are not among their institutions; even the household fire is not held sacred, or regarded as symbolical of family ties, and no rites are connected with it; there are no superstitious beliefs in reference to its extinction or pollution, and it is never employed literally or figuratively as a means of purification from uncleanness, blood, death, or moral guilt.

8. Fires are generally kindled by fanning the embers with a frond of the *Asplenium nidus* (*pā'tla*-), and they are extinguished by pressing the burning logs against some such object as a tree, canoe, or stone.

9. Reference must here be made to the mis-statement which has found its way into several papers concerning the existence of so-called "oven-trees" among the Andamanese. The belief appears to have originated in the practice which prevails among them of taking advantage, during brief halts, of the natural shelter afforded by the peculiar formation of the roots of the *Pterocarpus dalbergioides*, and trees of the *Ficus* genus, so common in these islands, and which, extending like buttresses on all sides of the trunk, are, especially when roofed over with a light thatch such as these people are accustomed to make in a few minutes, capable of accommodating small parties suddenly overtaken by a storm, or needing a temporary resting-place: the traces of fires lighted by successive parties against these trees, and the hollows thus caused, having been noticed, the opinion was formed, and, without sufficient corroborative evidence, promulgated, that they were "purposely charred," and that "great pains is taken in their preservation."<sup>2</sup> As a matter of fact, the Andamanese no more employ oven-trees than do the gypsies in Bulgaria, alluded to by General Pitt-Rivers, F.R.S.,<sup>3</sup> who, using constantly the same trees, have formed a semi-cylindrical chimney, which might reasonably be regarded, by one unacquainted with their habits, as an attempt to form an oven.

10. While it is the women's business to collect the wood, the duty of maintaining the fires, whether at home or while travelling

<sup>1</sup> *Vide ante* "Habitations," paragraph 5.

<sup>2</sup> *Vide* Mouat, pp. 308-9.

<sup>3</sup> *Vide* "Journ. Anthropol. Inst.," vol. xi, pp. 273 and 290 (Appendix I).

by land or sea, is not confined to them, but is undertaken by those of either sex who have most leisure or are least burdened.

11. Probably nothing introduced by us so impressed them with the extent of our power and resources as *matches*; that we should be able to produce fire with such ease and by such means was not unnaturally regarded as evidence of our being superhumanly gifted.

**Superstitions.**—1. Fire is supposed to possess the power of driving away evil spirits: when, therefore, at night they hear in imagination the approach of the dreaded *ērem-chàw'gala*,<sup>1</sup> they throw burning logs into the jungle surrounding the encampment. Again, should any of the community have occasion to leave their huts at night, no matter how short the distance, he (or she) invariably takes some fire as a protection against any demons that may be in the vicinity; a torch is also taken if it be very dark at the time.

2. Of darkness they assert that it was instituted on account of the misconduct of two of their ancestors, as will shortly be mentioned.<sup>2</sup>

3. From fear of displeasing *mai'a .ō'gar*-<sup>3</sup> (Mr. Moon), during the first few evenings of the third quarter, when he rises after sundown, they preserve silence, cease from any work on which they may be engaged—even halting should they be travelling—and almost extinguish any light or fire which they may be burning. This is owing to the belief that he is jealous of attention being distracted to other objects than himself at such a time, or of any other light being employed than that which he has been graciously pleased to afford so abundantly. By the time the moon has ascended a few degrees, however, they restore their fires and resume their former occupations, as they consider they have then sufficiently complied with *mai'a .ō'gar*-s wishes and requirements. The glowing aspect of the full moon on its first appearance above the horizon is supposed to indicate that *mai'a .ō'gar*- is enraged at finding some persons neglecting to observe these conciliatory measures; there is also an idea that, if he be greatly annoyed, he will punish them by withdrawing or diminishing the light of his countenance.

4. Regarding meteorolites they appear to possess no superstition. Shooting stars and meteors they view with apprehension, believing them to be lighted faggots hurled into the air by *ērem-chàw'gala* in order to ascertain the whereabouts of any unhappy wight in his vicinity; if, therefore, they happen to be away from

<sup>1</sup> *Vide post* "Religious Beliefs," &c., paragraph 12.

<sup>2</sup> *Vide post* "Mythology," paragraph 31.

<sup>3</sup> Singing, dancing, and thumping on the sounding board at that hour are, however, not displeasing to him.



their encampment when the phenomenon occurs, they invariably secrete themselves, at the bottom of a boat, for example, if fishing, and remain silent for a short time before venturing to resume their interrupted employment.

5. Between dawn and sunrise they will do no work, save what is noiseless, lest the sun should be offended, and cause an eclipse, storm, or other misfortune to overtake them. If, therefore, they have occasion to start on a journey or hunting expedition at so early an hour, they proceed as quietly as possible, and refrain from the practice, observed at other periods of the day, of testing the strength of their bow-strings, as the snapping noise caused thereby is one of those to which the sun objects.

6. They invariably partake of a meal soon after rising, as it is believed that no luck can attend any one who starts to his day's work on an empty stomach.

7. They dare not use the wood of the tree called *al'aba-* (the bark of which supplies the fibre used in making harpoon lines and turtle nets) for cooking turtle, for, as will be found elsewhere,<sup>1</sup> this is an act so abhorrent to *mai'a .ō'gar-* that he visits the offenders with summary and condign punishment.

8. In tempestuous weather the leaves of the *Minusops indica* are constantly thrown on the fires, as the popping sounds thus produced are thought to have the effect of assuaging *Pū'luga's* fury and causing the weather to moderate.

9. When they see a dark cloud approaching at a time when rain would prove very inconvenient, as when hunting, travelling, &c., they advise *Pū'luga-* to divert its course by shouting "*wā-ra-jō-bo kō'pke, kō'pke, kō'pke*" [*Wā-ra-jō-bo*<sup>2</sup> will bite, bite, bite (you)]. If in spite of this a shower falls they imagine that *Pū'luga-* is undeterred by their warning.

10. This practice of menacing *Pū'luga-* is probably that to which Colonel Symes alluded when he wrote that "they confess the influence of a malignant Being, and, during the south-west monsoon, when tempests prevail with unusual violence, they deprecate his wrath by wild choruses."

11. Storms are regarded as indications of *Pū'luga's* anger; winds are his breath, and are caused to be blown by his will; when it thunders *Pū'luga-* is said to be growling at something which has annoyed him; and lightning, they say, is a burning log flung by him at the object of his wrath.

12. There is an idea current that if during the first half of the rainy season they eat the *Caryota sobolifera*, or pluck and eat the seeds of the *Entada pursaetha*, or gather yams or other edible

<sup>1</sup> Vide post "Mythology," paragraph 32.

<sup>2</sup> This snake, as already mentioned under "Medicine," appears to be the *Ophiophagus elaps*.

roots, another deluge would be the consequence, for *Pū-luga-* is supposed to require these for his own consumption at that period of the year; the restriction, however, does not extend to the fallen seeds of the *Entada pursætha*, which may be collected and eaten at any time with impunity.

13. Another of the offences visited by *Pū-luga-* with storms is the burning of beeswax,<sup>1</sup> the smell of which is said to be peculiarly obnoxious to him. Owing to this belief it is a common practice secretly to burn wax when a person against whom they bear ill-will is engaged in fishing, hunting, or the like, the object being to spoil his sport and cause him as much discomfort as possible; hence arises the saying among them, when suddenly overtaken by a storm, that some one must be burning wax.

14. The rainbow is regarded as *ē-rem-chàw-gala's* dancing or sounding board, which is only visible at certain times; its appearance is said to betoken approaching sickness or death to one of their number, and is, therefore, inauspicious.<sup>2</sup>

15. There are no superstitions anent hills, valleys, rocks, &c., which, as stated in my last paper,<sup>3</sup> *Pū-luga-* is believed to have formed for some purpose of his own. The formation of creeks is attributed to a fortunate accident, the account of which being connected with their traditions must be reserved for that section.<sup>4</sup>

16. They imagine earthquakes to be caused by some mischievous male spirits of their deceased ancestors, who, in their impatience at the delay in the resurrection, combine to shake the palm-tree on which they believe the earth to rest, in the hope thereby of destroying the cane bridge<sup>5</sup> which stretches between this world and heaven, and alone maintains the former in its present position. These selfish spirits are, however, said to be careful never to indulge in such practices during the dry months, as they imagine that, in consequence of the surface of the earth being then much cracked with heat, there would be considerable risk of its tumbling about their ears and crushing them instead of toppling over in one solid mass. They are said, therefore, never to play at earthquakes except during, or shortly after, the rainy season. But for the intervention of female spirits, who do their utmost to dissuade or prevent their male companions from continued enjoyment of this dangerous pastime, they are persuaded that there would be much cause for alarm on every occurrence of an earthquake.

17. They believe that every child which is conceived has had a

<sup>1</sup> *ā-ja-pi-d-* (vide ante "Death and Burial," paragraph 4, foot-note).

<sup>2</sup> The Chippeway Indians call it the dancing spirit (vide "Travels in the Interior of North America," by Maximilian, Prince of Wied).

<sup>3</sup> Vide ante "Topography," paragraph 3.

<sup>4</sup> Vide post "Mythology," paragraph 13.

<sup>5</sup> Vide post "Religious Beliefs," &c., paragraph 25.

prior existence, but only as an infant. If a woman who has lost a baby is again about to become a mother, the name borne by the deceased is bestowed on the fetus, in the expectation that it will prove to be the same child born again. Should it be found at birth that the babe is of the same sex as the one who died, the identity is considered to be sufficiently established, but if otherwise the deceased one is said to be under the *râu-* (*Ficus laccifera*) in *châ-ità-n-* (Hades).<sup>1</sup>

18. They have no peculiar ideas in reference to yawning, hiccoughing, spitting, or eructating, and hissing<sup>2</sup> is unknown.

19. To sneeze is auspicious, and therefore regarded with favour. When any one sneezes the bystanders ask, "Who is thinking of you?" to which the person replies by naming some absent friend, or, should he be alone when he sneezes, he says, "Here I am at —" (naming the place).

20. If they have a dream which they regard as bad, as, for instance, that a canoe was dashed on a reef, or that an accident occurred while pig-hunting, or even if, when awake, they hear two canoes bumping against each other while at anchor, they consider it essential to accept such as a warning, and act accordingly, viz., by taking steps to incur no risk of a misadventure: this is generally accomplished by remaining at home for two or three days.

21. A small striped snake called *lâ-raba-* is supposed to produce the streams of the red oxide of iron, *kò-òb-chũ-linga-*, and olive-coloured clay, *chũ-linga-*, so much employed by them; the ground for the belief is the alleged fact that this snake, when disturbed, ejects from its tail a whitish fluid, which is of a deadly nature. They declare that the poison is such that it cannot be removed by washing or other means, and that it causes intense pain to the victim, who invariably dies within a few hours.

22. There is a small bird, not yet identified, called by them *pî-chrō-l-*, the meeting with which is looked upon as ominous of an approaching death in their midst. When a woodpecker is heard tapping on a tree he is said to be giving warning of the approach of *ũ-chu-*,<sup>3</sup> so they proceed in fear and trembling until the danger is supposed to be past. The notes of the *pai-* and *râteg-i-* (two birds not yet identified) are regarded as a sign that there are enemies in the vicinity. When, therefore, either of these are heard, they at once retrace their steps, if they happen to be on the move, or, should they be in an encampment, they

<sup>1</sup> *Vide ante* "Proper Names," paragraph 1, and *post* "Religious Beliefs," &c., paragraphs 22 and 23.

<sup>2</sup> This is accounted for by the absence of sibilants in their language (*vide* Appendix A).

<sup>3</sup> A legendary elephant, to be spoken of under "Mythology," paragraph 30.

temporarily vacate their huts and remain on the alert with their weapons ready for immediate use. The cry of another bird, called *chēra*-, informs them of the approaching visit of a friend. Finally, if while travelling they hear the cawing of a crow, they say they must be near some occupied, or recently abandoned encampment. This belief is doubtless traceable to the fact that these birds are among the principal scavengers of their camping grounds.

23. It has been noticed that they will never whistle between sunset and sunrise, and the reason they give is that this sound, more than any other, attracts *ērem-chàw-gala* during those hours. When animals behave in an unaccountable manner, especially at night, it is said to be because they see this demon.

**Religious Beliefs and Demonology.**—1. I have several times mentioned the Supernatural Beings, *Pū-luga*- and *ērem-chàw-gala*, and must now enter more into detail regarding the beliefs held by the Andamanese concerning these and other spirits.

2. Though no forms of worship or religious rites are to be found among them, yet are there certain beliefs regarding powers of good and evil, the Creation, and of a world beyond the grave, which show that even these savages have traditions more or less approximating the truth, but whence derived will ever remain a mystery.

3. It is extremely improbable that their legends were the result of the teaching of missionaries or others who might be supposed to have landed on their shores in by-gone years; for not only have they no tradition of any foreigners having settled in their midst and intermarried with their ancestors, or even of having so far established amicable intercourse as to be able to acquire a knowledge of any one of their languages, but our own records, so far from differing from theirs on these points, tend clearly to show that, from the earliest times till so recently as 1858, these islanders have been more or less universally regarded as cannibals, in consequence of which they were much dreaded by all navigating the adjacent seas. The persistency with which they resisted with showers of arrows all attempts to land on their shores,<sup>1</sup> precludes the belief that any one, prior to our settlement,<sup>2</sup> would from choice have visited these islanders in the vain hope of reclaiming them from their savage state, and in order to teach them the Biblical, Mohammedan, or other versions of the Creation, Fall, Deluge, &c.; while it may surely be

<sup>1</sup> The probable cause of their hostility will be explained in a later section (*vide post* "Trade," &c., paragraph 1).

<sup>2</sup> In 1870 an orphanage was established at Ross Island (Port Blair) for children of the aborigines, but it is very doubtful whether even the more intelligent of the inmates have obtained, much less retained, more than an elementary knowledge of the outline of the truths of Christianity.

assumed that if any shipwrecked persons had ever been cast on their coast, they would, in the improbable event of their lives being spared, have left some traces of the fact, such as might be looked for among the customs, in the culture, or physical characteristics of these savages, but these are vainly to be sought in any section of the race.

4. Moreover, to regard with suspicion, as some have done, the genuineness of such legends as those in question argues ignorance of the fact that numerous other tribes,<sup>1</sup> in equally remote or isolated localities have, when first discovered, been found to possess similar traditions on the subjects under consideration.

5. Further, on this subject as well as on all others in which there appeared any risk of falling into error, I have taken special care not only to obtain my information on each point from those who are considered by their fellow-tribesmen as authorities, but who, from having had little or no intercourse with other races, were in entire ignorance regarding any save their own legends: I have, besides, in every case, by subsequent inquiry, endeavoured to test their statements, with the trustworthiness of which I am thoroughly satisfied. I may also add that they all agree in stating that their accounts of the Creation, &c., were handed down to them by their first parent *Tōmo-* (Adam), and his immediate descendants, while they trace all their superstitions and practices to the "days before the Flood"!

6. I shall presently speak of the legends current anent the Creation, and also the Fall and Deluge: the latter will there be seen to have been, *selon eux*, consequent on the former.

7. In spite of their knowledge of, or belief in, a Supreme Being,<sup>2</sup> whom they call *Pūluga-*, they live in constant fear of certain evil spirits, whom they apprehend to be ever present, and on the watch to do them some bodily injury.

8. Of *Pūluga-* they say that—

I. Though His appearance is like fire, yet He is (now-a-days) invisible.

II. He was never born and is immortal.

III. By him the world and all objects, animate and inanimate, were created, excepting only the powers of evil.

IV. He is regarded as omniscient while it is day, knowing even the thoughts of their hearts.

V. He is angered by the commission of certain sins,<sup>3</sup> while to

<sup>1</sup> A story of the Fall occurs in the myths of the Eskimo, the South Sea Islanders, the Zulus, the Australians and the New Zealanders (*vide* "Biblical Traditions and Savage Myths."—*St. James' Gazette*, July 14th, 1881.)

<sup>2</sup> *Vide* Mouat, pp. 303-4.

<sup>3</sup> *Vide ante* "Crimes," paragraph 2.

those in pain or distress he is pitiful, and sometimes deigns to afford relief.

VI. He is the Judge from whom each soul receives its sentence after death, and, to *some* extent, the hope of escape from the torments of *jereg-lâr-mû-gu-* (regarding which anon) is said to affect their course of action in the present life.<sup>1</sup>

9. *Pûluga-* is believed to live in a large stone house in the sky, with a wife whom he created for himself; she is green in appearance, and has two names, *chân'a .âwlola* (Mother Fresh-water Shrimp), and *chân'a .pâ-lak-* (Mother Eel); by her he has a large family, all, except the eldest, being girls; these last, known as *mô-ro-win-* (sky spirits or angels), are said to be black in appearance, and, with their mother, amuse themselves from time to time by throwing fish and prawns into the streams and sea for the use of the inhabitants of the world. *Pûluga-*'s son is called *pîj-chôr-*: he is regarded as a sort of archangel, and is alone permitted to live with his father, whose orders it is his duty to make known to the *mô-ro-win-*.

10. *Pûluga-* is said to eat and drink, and, during the dry months of the year, to pass much of his time in sleep, as is proved by his voice (thunder) being rarely heard at that season; he is the source whence they receive all their supplies of animals, birds, and turtles; when they anger him he comes out of his house and blows, and growls, and hurls burning faggots at them—in other words, visits their offences with violent thunderstorms and heavy squalls; except for this purpose he seldom leaves home, unless it be during the rains, when he descends to earth to provide himself with certain kinds of food; how often this happens they do not know since, now-a-days, he is invisible.

11. *Pûluga-* never himself puts any one to death, but he objects so strongly to seeing a pig badly quartered and carved that he invariably points out those who offend him in this respect to a class of malevolent spirits called *chôl-*, one of whom forthwith despatches the unfortunate individual.

12. *Pûluga-* has no authority over the evil spirits, the most dreaded of which are *ĕrem-châw-gala*, *jû-ru-win-*, and *nî-la-*; they are self-created, and have existed from time immemorial. The first of these, the evil spirit of the woods, has a numerous progeny by his wife *chân'a .bad-gilola*, who remains at home with her daughters and younger children, while her husband and grown-up sons roam about the jungles with a lighted torch

<sup>1</sup> It is from regard to the fact that their beliefs on these points approximate so closely to the true faith concerning the Deity that I have adopted the English method of spelling all equivalents of "God" with an initial capital.



attached to their left legs, in order that the former may injure any unhappy wights who may meet them unprotected,<sup>1</sup> and in the dark; he generally makes his victims ill, or kills them by wounding them internally with invisible arrows,<sup>2</sup> and, if he is successful in causing death, it is supposed that they feast upon the raw flesh<sup>3</sup>; *ĕrem-chàw-gala*, indeed, appears to be to the Andamanese much what "*Arlak*"<sup>4</sup> is to the aboriginal Australian: in both cases these evil spirits are represented as afraid of light; *ĕrem-chàw-gala* is said to be also afraid of, or to avoid, the demon *nī-la*.

13. This spirit, *nī-la*,<sup>5</sup> is supposed to live in ant-hills, and to have neither wife nor child; he is not regarded as such a malevolent personage as *ĕrem-chàw-gala*, and, though he is always armed with a knife, he rarely injures human beings with it, or, when he does do so, it is not in order to feed upon their bodies, for he is said to eat earth only.

14. As regards *jū-ru-win*-, the evil spirit of the sea, they say that he too is invisible, and lives in the sea with his wife and children, who help him to devour the bodies of those who are drowned or buried at sea; fish constitute the staple of his food, but he also occasionally, by way of variety, attacks the aborigines he finds fishing on the shores or by the creeks. The weapon he uses is a spear, and persons who are seized with cramp or any sudden illness, on returning from, or while on the water are said to have been "speared" by *jū-ru-win*-. He has various submarine residences, and boats for travelling under the surface of the sea, while he carries with him a net, in which he places all the victims, human or piscine, he may succeed in capturing.

15. Besides these three chief demons, there is a company of evil spirits who are called *chól*-, and who are much dreaded. They are believed to be descendants of *mai'a chól*-,<sup>6</sup> who lived in antediluvian times. They generally punish those who offend them by baking or roasting pig's flesh, the smell of which is particularly obnoxious to them, as it is also to *Pū-luga*-, who, therefore, often assists them in discovering the delinquent; the same risk does not attend *boiling* pork,<sup>7</sup> which the olfactory nerves of the fastidious *chól*- are not keen enough to detect.

<sup>1</sup> *Vide ante* "Superstitions," paragraph 1.

<sup>2</sup> *Vide ante* "Medicine," paragraph 1 (foot-note), and "Death and Burial," paragraph 24.

<sup>3</sup> *Vide ante* "Death and Burial," paragraph 26.

<sup>4</sup> *Vide* Wood, "Natural History of Man," p. 92.

<sup>5</sup> Cases have been cited of persons who have been found stabbed, whose deaths are attributed to *Nī-la*: the possibility of the individuals in question having been murdered is scouted.

<sup>6</sup> *Vide post* "Mythology," paragraph 33.

<sup>7</sup> *Vide post* "Food," paragraph 27.

16. While the Andamanese say that they are liable to be struck by *ĕrem-chàugala* or *jàru-win-* at any time or in any place, the *chòl-* strike those only who offend them, and that during the day while they are stationary, this being necessitated by the distance from the earth of their abode, whence they hurl their darts: an invisible spear is the weapon they always use, and this is thrown with unerring aim at the head of their victims, and is invariably fatal. As these demons are considered especially dangerous on the hottest days, they are apparently held accountable for the deaths from sunstroke which happen from time to time.

17. The sun, *chāwa .bōdo-*, is the wife of the moon, *maia .ōgar-*, and the stars, *chāto-*, which are of both sexes, are their children: the latter go to sleep during the day; the whole family have their meals near *Pāluga-*'s house, but never enter it. *chāwa .bōdo-* is like fire and covered with thorns, but *maia .ōgar-* is white skinned, and has two long tusks<sup>1</sup> and a big beard; their home is situated somewhere below the eastern horizon, and while the former, after setting, rests till dawn, the latter, probably in consequence of the cares of his numerous family, is obliged to keep very irregular hours. During their passage under the earth to their home, they are believed to afford the blessing of light to the unfortunate spirits in Hades, and also, while sleeping, to shed a "dim religious light" over that region: it is by *Pāluga-*'s command that the celestial bodies, while crossing the sky, bestow their light.

18. The phenomena of the waning and waxing of the moon is explained by saying that they are occasioned by "his" applying a coating of cloud to his person by degrees, after the manner of their own use of *kò'ob-* and *tā'la-ōg-*,<sup>2</sup> and then gradually wiping it off.<sup>3</sup>

19. Reference has already been made to their superstition regarding the cause of a lunar eclipse, but in case *maia .ōgar-* should be so ill-advised as permanently to withhold his light or render himself in other ways still more disagreeable, whenever the moon is eclipsed some persons at once seize their bows and twang them as rapidly as possible, thereby producing a rattling sound as if discharging a large number of arrows, while others commence at once sharpening their *rāta-*.<sup>4</sup> Of course this hostile demonstration is never lost upon the moon, who does not venture to hurt those who show themselves ready

<sup>1</sup> The horns of the crescent moon.

<sup>2</sup> Vide Appendix B, items 58 and 60.

<sup>3</sup> "The Eskimo say that the sun, which they regard as feminine, smears the face of her brother, the moon, with soot, when he presses his love upon her" (vide Peschel, p. 256).

<sup>4</sup> Vide Appendix B, item 2.

to give him so uncomfortable a reception. Their immunity from harm on these occasions has given rise to some joking at the expense of the luminary in question, for, during the continuance of the eclipse, they shout in inviting tones to the hidden orb as follows :—*ō-gar-, la den bal'ak ban lē-be ng'īdō-ati! dō-ati! dō-ati!*<sup>1</sup> (O moon, I will give you the seed of the *balak*! show yourself! appear! appear!)

20. This seems to explain the custom which Colonel Symes describes as adoration to the sun and moon, for, as has been stated, no traces of worship or forms of religion, in the common acceptance of the term, exist among these tribes.

21. A solar eclipse alarms them too much to allow of their indulging in jests or threats, &c.: during the time it lasts they all remain silent and motionless, as if in momentary expectation of some calamity.

22. The world, exclusive of the sea, is declared to be flat and to rest on an immense palm-tree (*Caryota sobolifera*) called *bā-rata-*, which stands in the midst of a jungle comprising the whole area under the earth. This jungle, *chā-itān-* (Hades), is a gloomy place, for, though visited in turn by the sun and moon, it can, in consequence of its situation, be only partially lighted: it is hither the *spirits* (*chāu-ga-*) of the departed are sent by *Pāluga-* to await the Resurrection.

23. No change takes place in *chā-itān-* in respect to growth or age; all remain as they were at the time of their departure from the earth, and the adults are represented as engaged in hunting, after a manner peculiar to disembodied spirits. In order to furnish them with sport the spirits of animals and birds are also sent to *chā-itān-*, but as there is no sea there, the *chāu-ga-* of fish and turtle remain in their native element and are preyed upon by *jū-ru-win-*. The spirits (*chāu-ga-*) and souls (*ōt-yō-lo-*) of all children who die before they cease to be entirely dependent on their parents (*i.e.*, under six years of age) go to *chā-itān-*, and are placed under a *rāu-tree*<sup>2</sup> (*Ficus laccifera*) on the fruit of which they subsist. As none can quit *chā-itān-* who have once entered, they support their stories regarding it by a tradition that in ages long past an *ōko-pai-ad-*<sup>3</sup> was favoured in a dream with a vision of the regions and of the pursuits of the disembodied spirits.

24. Some of their legends, as will be seen elsewhere,<sup>4</sup> appear to bear out the doctrine of the transmigration of souls, as

<sup>1</sup> This is said derisively, for, although these seeds are largely consumed by the pigs, the aborigines themselves do not consider them fit for food.

<sup>2</sup> *Vide ante* "Superstitions," paragraph 17.

<sup>3</sup> *Vide ante* "Magic and Witchcraft," paragraph 1.

<sup>4</sup> *Vide post* "Mythology," paragraphs 15, 16, 29.

certain of their ancestors (*tô-mola*) are stated to have vanished from earth in the form of various kinds of animals and fish. The spirits of those not thus transformed, although in Hades are believed occasionally to assist them in performing tasks of unusual difficulty; and it is thought that all the departed are to some extent conscious of what transpires in the world they once inhabited, and are able to promote the welfare of those who bear them in mind.<sup>1</sup>

25. Between the earth and the eastern sky there stretches an invisible cane bridge (*pî-dga-lâr-châw-ga-*) which steadies the former and connects it with *jer-eg-* (paradise); over this bridge the souls (*ôt-yô-lo-*) of the departed<sup>2</sup> pass into paradise, or to *jer-eg-lâr-mû-gu-*, which is situated below it: this latter place might be described as purgatory, for it is a place of punishment for those who have been guilty of heinous sins, such as murder. Like Dante, they depict it as very cold, and therefore a most undesirable region for mortals to inhabit. From all this it will be gathered that these despised savages believe in a future state, in the resurrection, and in the three-fold constitution of man.

26. In serious illness the sufferer's spirit (*châw-ga-*) is said to be hovering between this world and Hades,<sup>3</sup> but does not remain permanently in the latter place until some time after death, during which interval it haunts the abode of the deceased and the spot where the remains have been deposited.<sup>4</sup> In dreams it is the soul which, having taken its departure through the nostrils, sees or is engaged in the manner represented to the sleeper.

27. The Andamanese do not regard their shadows<sup>5</sup> but their reflections (in any mirror) as their souls. The colour of the soul is said to be red, and that of the spirit black, and, though invisible to human eyes,<sup>6</sup> they partake of the form of the person to whom they belong. Evil emanates from the soul, and all good from the spirit; at the resurrection they will be re-united and live permanently on the new earth, for the souls of the wicked will then have been reformed by the punishments inflicted on them during their residence in *jer-eg-lâr-mû-gu-*.

28. The future life will be but a repetition of the present, but all will then remain in the prime of life, sickness and death will be unknown, and there will be no more marrying or giving in

<sup>1</sup> *Vide ante* "Medicine," paragraph 8, and "Death and Burial," paragraph 18.

<sup>2</sup> Their spirits (*châw-ga-*) pass to *châ-itân-* (*vide* paragraphs 22 and 23).

<sup>3</sup> *Vide* "Journ. Anthrop. Inst.," vol. xi, p. 289.

<sup>4</sup> *Vide ante* "Death and Burial," paragraphs 4 and 15.

<sup>5</sup> As is believed to be the case among certain races, *e.g.*, the Benin negroes.

<sup>6</sup> *Vide ante* "Magic and Witchcraft," paragraph 7.

marriage. The animals, birds, and fish will also re-appear in the new world in their present form.

29. This blissful state will be inaugurated by a great earthquake,<sup>1</sup> which, occurring by *Pūluga's* command, will break the *pīdga-lār-chāu-ga-* and cause the earth to turn over: all alive at the time will perish, exchanging places with their deceased ancestors.<sup>2</sup>

30. There is no trace to be found of the worship of trees, stones, or other objects, and it is a mistake to suppose<sup>3</sup> that they adore or invoke the celestial bodies. There is no salutation, dance, or festival of any kind held in honour of the new moon: its appearance does not evoke anything more than an exclamation such as *yēlo! .ōgar l'ādō'atire*. (Hurrah! there's the moon.)

**Mythology.**—1. In other sections mention has been made of *Pūluga*, the Creator of all, and it has also been stated that no reason is given for the formation of the earth's surface, except that it was according to His will, and the same hypothesis is held to account for the varying seasons.

2. Until recent years it was supposed<sup>4</sup> that the Andamanese were without traditions, and had no idea of their own origin, but since we have been enabled to become better acquainted with them it has been ascertained that such is not the case. While I have been extremely careful as to the source whence I obtained my information, I would at the same time mention that much that is found under these last headings has been obtained from the older and more intelligent members of distant communities, and is probably little, if at all, known to many of the rising generation in our immediate vicinity.

3. Certain mythic legends are related to the young by *ōko-pai'ad's*<sup>5</sup> parents and others, which refer to the supposed adventures or history of remote ancestors, and, though the recital not unfrequently evokes much mirth, they are none the less accepted as veracious. The personages figuring in these tales are believed to be real and historical, but, beyond the fact of a very general acceptance and agreement of the traditions respecting them, no satisfactory traces are to be found of their existence except in the lively imaginations of their descendants.

4. There are a few discrepancies in their accounts of the

<sup>1</sup> *Vide ante* "Superstitions," paragraph 16.

<sup>2</sup> Whether the fate of the former is irrevocably fixed is not explained, but with these, as with other savages, it is in vain to expect them to understand the logical conclusions to which their beliefs tend.

<sup>3</sup> *Vide* statements of Symes, Brown, Grant, and Anderson; *vide also ante* "Superstitions," paragraphs 9 and 10.

<sup>4</sup> *Vide* Mouat, p. 343.

<sup>5</sup> *Vide ante* "Magic and Witchcraft," paragraph 1.

creation and origin of the human species, but in the main features all are agreed. The following tradition appears to be the most generally received, and, as far as possible, it is given in the words in which it was first taken down:—

5. In the beginning, after the world had been made, *Pālugā-* created a man whose name was *tōmo*<sup>1</sup>; he was black, like the present inhabitants, but much taller and bearded. *Pālugā-* showed him the various fruit-trees in the jungle, which then existed only at *wòtām'i*<sup>2</sup> (the "Garden of Eden"), and, in doing so, told him not to partake of certain of them during the rains: he then taught him how to obtain and use fire; this he did by first stacking in alternate layers two varieties of wood known as *chôr-* and *bēr-*, and then bidding *chān'a bōdo-* (Mother Sun) to come and sit on or near the pile until she had ignited it, after which she returned to her place in the sky. *tōmo-* was then taught how to cook pigs, which were easily caught, as they had in those days neither ears nor noses.

6. Another version relates that *Pālugā-* came with a spirit or angel called *lack'i*<sup>3</sup> *pūnga āblola* to instruct *tōmo-*, who, at his direction, prepared a pyre and then struck it, on which the fire was kindled, and *pūnga āblola* proceeded to teach him how to cook food.

7. About the origin of the first woman, whose name was *chān'a ēlewadi*, there is a diversity of belief: according to some, *Pālugā-* created her after he had taught *tōmo-* how to sustain life; others say that *tōmo-* saw her swimming near his home and called to her, whereupon she landed and lived with him; while a third story represents her as coming pregnant to Kyd Island, where she gave birth to several male and female children, who subsequently became the progenitors of the present race.

8. These legends ascribe the name *tōmola* to all the descendants of their first parents until the period of the Deluge. *tōmo-* had two sons and two daughters by *chān'a ēlewadi*; the names of the former were *bīrola* and *bōrola*, and of the latter *rīela* and *chōrmila*.

9. As time went on, the pigs multiplied to such an extent that they became a nuisance, so, with woman's ready wit, *chān'a ēlewadi* drilled holes in their heads and snouts, thereby giving them the powers of hearing and smelling, and enabling them to avoid danger and procure food for themselves. *Pālugā-* then covered the whole land with jungle, into which the pigs

<sup>1</sup> The name of the first man among the Brazilians was *Tamoi* (vide Tylor's "Anthropology").

<sup>2</sup> Situated about long. 92° 52', and lat. 12° 18'. Some assert that this event occurred at *tōlo-kòt'imi*, which is in the same district.

<sup>3</sup> *lack'i* is applied to deceased persons, and answers to "the late."



wandered in various directions.<sup>1</sup> But this change was found to have its disadvantages, as it became next to impossible to catch the now wily *sus*. *Pūluga*-, however, again came to the rescue, and taught *tōmo*- how to construct bows and arrows, and to hunt, after which he taught him to manufacture canoes and harpoons, and to fish. On a subsequent visit<sup>2</sup> he instructed *chān'a ēlewadi* in the art of basket and net-making, and in the use of red-ochre (*kōi'ob*-) and white clay<sup>3</sup> (*tā'la-ōg*-), and thus by degrees he imparted to their first parents a knowledge of the various arts which have ever since been practised among them.

10. *tōmo* and *ēlewadi* were also told that, though they were to work in the wet months, they must not do so after sundown, because by doing so they would worry the *būtu*-,<sup>4</sup> which are under *Pūluga*'s special protection. Any noise, such as working (*kōpke*) with an adze, would cause the *būtu*'s heads to ache, and that would be a serious matter. During the cold and dry seasons work may be carried on day and night, as the *būtu*- is then seldom seen, and cannot be disturbed.

11. As soon as the first couple were united *Pūluga*- gave them the *bō'jig-yāb*- dialect, which is the language spoken to this day, according to their belief, by the tribe inhabiting the south and south-eastern portion of middle Andaman, in which district *wōtāem-i*- is situated. It is, therefore, regarded as the mother tongue, from which the dialects of the various other tribes have sprung.

12. The canoes used in those days are said to have had no outriggers, and were made by scooping out the trunk of the *Pandanus*, which is believed to have been much larger than it is now-a-days, and well adapted for the purpose.

13. The formation of creeks is attributed to a fortunate accident: it happened that one day *tōmo*- harpooned a large fish, called *kō-ro-ngid'i-chāu*-, which had a projecting snout where-with it lashed the shore in its frantic efforts to escape; so violent were the blows that the land was broken each time they fell, a result which proved of great benefit and service to the redoubtable harpooner and his descendants.

14. *tōmo*- lived to a great age, but even before his death his offspring became so numerous that their home could no longer accommodate them. At *Pūluga*'s bidding they were furnished with all necessary weapons, implements, and fire, and then

<sup>1</sup> Another version states that *tōmo*- caused the jungle to spring up beyond *wōtāem-i*- by stringing flies on a number of arrows, and shooting them off, whereupon they turned into trees, and soon spread over the country.

<sup>2</sup> In those days *Pūluga*- lived at Saddle Peak (*vide ante* "Topography," paragraph 2), and being so near, used often to pay them a visit.

<sup>3</sup> *Vide post* paragraph 27, and Appendix B, items 58 and 60.

<sup>4</sup> *Vide post* "Food," paragraph 18.

scattered in pairs all over the country. When this exodus occurred *Pūluga-* provided each party with a distinct dialect.<sup>1</sup>

15. After the dispersion of the surplus members of his family, *tō-mo*, one day while hunting, fell into a creek called *yāra-tig-jig-*, and was drowned. He was at once transformed into a cachalot (*kā-ra-dū-ku-*), and from him have sprung all the cetaceans of this class.<sup>2</sup> *chān'a ēlewadi*, ignorant of the accident that had befallen her husband, went in a canoe with some of her grandchildren to ascertain the cause of his continued absence; on seeing them, *kā-ra-dū-ku-* upset their skiff, and drowned his wife and most of her companions. She became a small crab, of a description still named after her, *ēlewadi-*, and the others were transformed into iguanas.<sup>3</sup>

16. Consequent on the disappearance of *tō-mo* and his wife, the duties of headship over the community at *wōtāem-i* devolved upon one of their grandchildren, named *kō'lwōt-*, who was distinguished by being the first to spear and catch turtles. The *tō-mola* remained on the islands long after *tō-mo*'s transformation, but after *kō'lwōt*'s death, according to one legend, they grew disobedient, and as *Pūluga-* ceased to visit them, became more and more remiss in their observance of the commands given at the Creation. At last *Pūluga*'s anger burst forth, and, without any warning, he sent a great flood which covered the whole land,<sup>4</sup> and destroyed all living. Four persons (two men, *lō-ralola* and *pō'ilola*, and two women, *kā'lola* and *rī-malola*), who happened to be in a canoe when the catastrophe occurred, were able to effect an escape. When the waters subsided, they found themselves near *wōtāem-i*, where they landed and discovered that every living thing on earth had perished; but *Pūluga-* re-created the animals, birds, &c. In spite of this, however, they suffered severely, in consequence of all their fires having been extinguished, and they could devise

<sup>1</sup> It would almost seem that, without straining the legend to suit facts, we might discern in this a faint echo of the Biblical account of the confusion of tongues and dispersion at Babel.

<sup>2</sup> They consider that the whale is evil disposed towards them, and attribute their occasional non-success in catching turtles to his influence. *kā-ra-dū-ku-* is also accused of inciting sharks and other large fish to attack them.

<sup>3</sup> Another version of this story is, that wearied with an unsuccessful day's hunting, *Tō-mo* went to the shore where he found a *chī-di-* (*Pinna*) shell-fish; while playing with it, it fastened on him, and he was unable to free himself until a *bai'an-* (*Paradoxurus*) seized the *chī-di-* and liberated him at the expense of one of his members. Shortly after he saw his wife and some of their children coming after him in a canoe; unwilling that they should become aware of the misfortune which had befallen him, he upset the canoe, drowning its occupants and himself. He then became *kā-ra-dū-ku-*, and the others *dū-ku-*, which are now very plentiful in the jungles.

<sup>4</sup> Some modify this statement by saying that Saddle Peak, where *Pūluga-* then dwelt, was not submerged.

no means of repairing their loss. At this juncture one of their recently deceased friends appeared in their midst in the form of a bird named *lūratūt*.<sup>1</sup> Seeing their distress he flew up to *mō-ro*, the sky, where he discovered *Pūluga*- seated beside his fire; he thereupon seized<sup>2</sup> and attempted to carry away in his beak a burning log, but the heat or weight, or both, rendered the task impossible, and the blazing brand fell on *Pūluga*-, who, incensed with pain, hurled it at the intruder; happily for those concerned, the missile missed its mark and fell near the very spot where the four survivors were deploring their condition. As *lūratūt*- alighted in their midst at the same moment, he gained the full credit of having removed the chief cause of their distress.<sup>3</sup>

17. Being relieved from anxiety as to their means of subsistence, *lōrola* and his companions began to entertain sentiments of anger and resentment against *Pūluga*- for his wholesale destruction of their friends, and, accordingly, when they met him one day at *tō-lo-kōt'imi*-, they determined to kill him, but were deterred from their purpose by *Pūluga*- himself, for he assured them that, whereas he was as hard as wood and could not be injured by their arrows, any attempt they might venture to make on his life would cause him to destroy them all. Having reduced them to submission by these assurances, *Pūluga*- explained that they had brought the Deluge upon themselves through their wilful disobedience of the strict injunctions he had laid down, and which had always been observed by their forefathers, and he intimated that a repetition of their transgressions would inevitably lead to their utter destruction.

18. This is said to be the last occasion on which *Pūluga*- rendered himself visible, or held any communication with them, but the warning he then gave them has not been forgotten, and the islanders are to this day strict in their observance of his commands.

19. Another legend regarding the origin of the Deluge states that one day, at the commencement of the rainy season, a *tō'mola* named *bē'rebi*- came to visit *kō'lwōt*-'s mother, *chān'a ē'rep*-, with the express intention of seeing her son, of whom he

<sup>1</sup> A small variety of kingfisher.

<sup>2</sup> The myth of Prometheus will recur to the reader.

<sup>3</sup> Since that day till the present time, they say they have never been without fire, thanks to the precautions they employ to guard against its extinction. I would add that when first making my investigations on this subject some six years ago, I was led to believe that this kingfisher is regarded by the present inhabitants with a certain amount of veneration (*vide* "The Lord's Prayer in the South Andaman dialect," p. 49), but I have since been assured that such is not the case.

was extremely jealous. When he appeared, *bē-rebi*- treacherously bit him in the arm, but his teeth became fixed in the flesh and he was therefore unable to detach himself from his victim, whose friends promptly avenged his murder, and disposed of the corpses by throwing them into the sea.<sup>1</sup> The bereaved mother, in her rage, grief, and despair, committed various acts, against which *tō-mo*- had been warned by *Pū-luga*-, and while so doing incited others to follow her example by the following words:—

*ē, ē, ē, dīa rá-gūmul lab dā-la,*  
*ē, ē, ē, ngūl ká-ja pīj pū-gatken,*  
*ē, ē, ē, ngūl chō-akan tō-aken,*  
*ē, ē, ē, ngūl bođ-rato á-kà-kold-ken,*  
*ē, ē, ē, ngūl gō-no bō-angken,*  
*ē, ē, ē, ngūl tōng chođ-ra bō-angken,*  
*ē, ē, ē, ngig árlōt pū-laijoken.*

The translation of which is:—

“*ē, ē, ē,*<sup>2</sup> (sobbing)—My grown-up handsome son,  
 Burn the wax,<sup>3</sup>  
 Grind the seed of the *chá-kan*-,<sup>4</sup>  
 Destroy the *bá-rata*-,<sup>5</sup>  
 Dig up the *gō-no*-,<sup>6</sup>  
 Dig up the *chá-ti*-,<sup>6</sup>  
 Destroy everything.”

Thereupon *Pū-luga*- was exceeding wroth, and sent the flood which destroyed all living things with the exception of two men and two women.

20. This tradition is preserved in the following lines:—

*Kēledōat ibá-ji lár chō-ra,*  
*Rá-gūmul abgō-rka en igbođ-di,*  
*Rá-gūmul lē ligā kō-arnga,*  
*Rá-gūmul abgō-rka.*  
*Tođ-lo á-rbo ev dá-kan choarpo.*

The meaning of which is:—

“Bring the boat to the beach  
 I will see your fine grown-up son,

<sup>1</sup> *Kó-lwót*-, after death, was transformed into a species of tree lizard, which is still named after him, and *bē-rebi*- became a fish called *kō-ngo*-, which is armed with a row of poisonous barbs on its back.

<sup>2</sup> Exclamation indicative of grief.

<sup>3</sup> *Vide ante* “Superstitions,” paragraph 13.

<sup>4</sup> The *Entada pursathá*.

<sup>5</sup> The *Caryota sobolifera*.

<sup>6</sup> Two varieties of edible roots much relished by them after the rains.

The grown-up son who threw the youths (into the sea),<sup>1</sup>  
The fine grown-up son,  
My adze is rusty, I will stain my lips with his blood."

21. In this, as in all their songs and chants, a good deal is left to the imagination, but from the explanations which have been given by the aborigines, the following appears to afford some light on the subject:—*bē-rebi*, being jealous of the renown *kô'lwôt*- had won for himself by his numerous accomplishments and great strength, took advantage of meeting him and his mother one day on the water to ask them to let him enter their boat. On their complying with his request, he provided himself with a rusty adze and a hone, and joined them; approaching near to *kô'lwôt*-, he put down the adze and hone, remarking on the rusty condition of the former; then taking *kô'lwôt*- by the arm he sniffed it from the wrist to the shoulder, as if admiring the development of the muscles; while doing so he muttered the threat of staining his lips with blood, which he shortly after fulfilled in the manner already described.

22. *lach-i*<sup>2</sup> *lô'ralola*, the chief of the survivors from the Deluge, gave, at his death, the name of *chàwga-tâ-banga*-<sup>3</sup> to their descendants. When, for the second time in their history, their numbers had increased to so great an extent that it became impossible for them to remain together in one spot, an exodus, similar to the first, took place; each party, being furnished with fire and every other essential, started in a different direction, and on settling down adopted a new and distinct dialect. They each received a tribal name, and from them have sprung the various tribes still existing on the islands.

23. The *chàwga-tâ-banga*- are described as fine tall men with large beards, and they are said to have been long-lived,<sup>4</sup> but, in other respects and in their mode of living they did not differ from the present inhabitants. The name seems to have been borne till comparatively recent times, as a few still living are said to remember having seen the last of the so-called *chàwga-tâ-banga*-.

24. After the Flood the *Pandanus* was found to have deteriorated so greatly as to be unfit for its former uses; their canoes were consequently thenceforth made by scooping the trunks of the *Sterculia villosa*, and other trees of a similar description.<sup>5</sup>

25. The story regarding certain *tô'mola*, who failed to

<sup>1</sup> Literally, *caused them to flee into the sea* (vide post paragraph 29).

<sup>2</sup> Signifying "the late," or "deceased."

<sup>3</sup> i.e., the big-bodied.

<sup>4</sup> The Andamanese attribute the present increased rate of mortality to the jungle clearances we have made.

<sup>5</sup> The native names of which are *bá'ja*-; *mañ*-; *yē-re*-; and *kô'kon*-.

observe the rules laid down for neophytes, states that, on the day after they broke their fast of *reg-jī-ri*<sup>1</sup> (kidney fat of pig), they left the encampment without giving notice of their intention to their friends, and the result was that, when they were missed and searched for, it was found they had gone to the shore to fish, and had there met a sad fate; the body of one was discovered adhering to a large boulder, and turned into stone, while the other, likewise in a state of petrification, was standing erect beside it.

26. *ma'ia .dū-ku-*, who appears to be identical with *.tō-mo-*,<sup>2</sup> is said to have been the first to tattoo himself. One day, while out on a fishing expedition, he shot an arrow; missing its object it struck a hard substance which proved to be a piece of iron, the first ever found. With it *.dū-ku-* made an arrow-head and tattooed himself, after which he sang this ditty:—

“*Tōng mā līr pī-renga? tōng yī-tiken! tōng yī-tiken!*  
*tōng mā līr pī-renga? tōng yī-tiken!*”

the interpretation of which is “What can now strike me? I am tattooed! I am tattooed!” &c. (*Da capo*).

27. It would seem that after the Deluge they had to feel their way again to the necessary arts and manufactures in which *Pū-luga-* had vouchsafed to instruct their first parents.<sup>3</sup> Especially is this declared to be the case with the pigments used in painting their bodies, one of which, viz.: *tā-la-ōg-*,<sup>4</sup> is said to have been accidentally re-discovered by a *.tō-mola* female, named *chā'n'a .chā-riā-*, while she was engaged in searching for the much-relished edible root known as *gō-no-*; another woman, *chā'n'a .tē-lin*, is credited with finding, about the same time, *kōi-ob-chū-lnga*.<sup>5</sup> Like true daughters of Eve they were not long at a loss in turning their knowledge to some (?) profitable account.

28. Another of their antediluvian ancestors was famous for propagating yams. This was *ma'ia .bū-mroāg-*, who, in shooting an arrow, struck the creeper belonging to the favourite variety called *gō-no-*; his curiosity being excited he dug up the root, and tasted it: the result being satisfactory, he informed his friends of his discovery, and they all feasted upon it; when they had had sufficient, he scattered the remains in different directions; this

<sup>1</sup> *Vide ante* “Initiatory Ceremonies,” paragraph 5.

<sup>2</sup> *.dū-ku* is also credited with having, like Pygmalion, created a woman! The Andamanese Galatea (*chā'n'a .tōt-kalat-chā-pa-* or *chā'n'a .bai'an-*) was made out of *chā-pa-* firewood, and in due course became her creator's wife. The legend does not explain how she was endued with life, but relates that at death she became a *Paradoxurus*.

<sup>3</sup> *Vide ante* “Mythology,” paragraph 9.

<sup>4</sup> *Vide* Appendix B, item 58.

<sup>5</sup> *Vide* Appendix B, item 63.



apparent waste so angered his mother that, on pretence of shaving him, she split his head open with a flint. After his death it was found that the act for which he suffered had tended to the spread of the plant which is now plentiful.

29. To explain the origin of certain fish, they say that one day before the Deluge, *mai'a .kô'lwôt-* went to visit an encampment of the *.tô'mola* situated in the Archipelago. While engaged in his song,<sup>1</sup> the women, through inattention to his instructions, marred the effect of the chorus, so, to punish them, he seized his bow, whereupon the whole party in terror fled in all directions; some escaping into the sea were changed into dugongs, porpoises, sharks, and various other fish which till then had not been seen.<sup>2</sup>

30. Only two geological legends have hitherto been discovered: the one refers to a large block of sandstone lying at *.wòtâem-i-*, and the other relates to two boulders of elephantine proportions, situated within a mile of the same place, which convey the idea that they once formed part of a narrow neck of land which jutted out into the sea, but which has been gradually demolished by storms and by the action of the waves. The belief current regarding the first is that the deep incisions visible on its surface are hieroglyphics inscribed by *.tô'mo-*, the first man, giving a history of the Creation, which event, as already mentioned, is believed by all the tribes of our acquaintance to have occurred at this very spot *.wòtâem-i-*. The art of deciphering the supposed record has, it is said, been lost for many ages, and no attempt is made to assign a specific meaning to any of the marks which form the mythical inscription. Many of the legends regarding their ancestors picture the scene of their exploits at *.wòtâem-i-*; hence the special interest of the spot to all the tribes of Middle and South Andaman and the Archipelago. In regard to the two boulders, tradition declares that one day, in the years before the Deluge, *mai'a .dū'ku-* and some of his friends, seeing two animals swimming near the shore, shouted to them, whereupon they came out of the water and showed themselves to be two enormous creatures such as had never before been seen or dreamt of by

<sup>1</sup> *Vide post* "Games and Amusements," paragraph 22.

<sup>2</sup> The following is a list of *.tô'mola* who were transformed into animals, birds, or fish:—

<i>.kâ'ra-dū'ku-</i> (whale),	<i>.mū'rud-</i> (pigeon),
<i>.dū'ku-</i> (iguana),	<i>.ē'ep-</i> (parrot),
<i>.ē'lewadi-</i> (small species of crab),	<i>.tē'liu-</i> (jungle fowl),
<i>.tegbū'l-</i> (dugong),	<i>.bā'tka-</i> (crow),
<i>.kô'lwô't-</i> } (tree lizards),	<i>.chô'kab-</i> (heron),
<i>.ā'ga-</i> }	<i>.bād'gi-</i> (fish eagle),
<i>.bā'ān-</i> (paradoxurus),	<i>.chō'ag-</i> (porpoise),
<i>.ī'd-</i> (rat),	and various other fish.
<i>.lū'ratūt-</i> (a variety of kingfisher),	

the *tô'mola*, who were so terrified that they fled precipitately; *dû'ku*- with difficulty escaped, but a few of his companions were less fortunate, being captured and devoured by these monsters, who are known by the name of *û'chu*-. Consternation filled the minds of the scanty population then inhabiting the "world," when their deliverance was unexpectedly and speedily effected by the *û'chu*-, who, in attempting to ford the shallow water near *wòldem'i*-, stuck fast in the deep mud, and, being unable to extricate themselves, met a lingering death.<sup>1</sup>

31. The manner in which the world was illuminated at the beginning is not clearly to be ascertained from their legends, for one story states that the sun and moon were subsequently created at *tô'mo*'s request, as he found that, under the then existing circumstances, it was impossible to catch fish by night or to hunt by day; while, in direct disagreement with this, another story tells us that night was a punishment brought upon mankind by certain individuals who angered *Pû'luga*- by killing a caterpillar. The tale informs us that the sun, one day, burned so fiercely as to cause great distress. Two women named *chân'a lû'mi*- and *chân'a jâ'ra-ngûd*-, became exceedingly irritable, and while in this unhappy frame of mind they discovered a caterpillar (*gû'rug*-), and a certain plant called *û'tura*-. By way of venting their spleen, one crushed the hapless grub, and the other destroyed the plant. These wanton acts so displeased *Pû'luga*- that he determined to punish them, and to teach them to appreciate the privilege of daylight, which they had hitherto uninterruptedly enjoyed. He accordingly visited the earth with a long-continued darkness, which caused every one much inconvenience and distress. At last their chief, *mai'a kô'lwô't*-, to whom reference has already been made, hit upon a happy expedient of inducing *Pû'luga*- to restore the former state of things by trying to assure him that they were quite unconcerned, and could enjoy themselves in spite of light being withheld from them. To accomplish this, he invented the custom of dancing and singing, the result of which was that *Pû'luga*-, finding that they had frustrated his intention, granted, as a first concession, alternate periods of day and night, and subsequently, moved by the difficulties often occasioned by the latter, created the moon to mitigate their troubles. It is in this way that they account for the fact of the same word being used to denote a *caterpillar* and *night*.

32. With regard to the *al'aba*-, which tree they value greatly, in consequence of the fibre produced from its bark being

<sup>1</sup> The name *û'chu* has accordingly been given to the two boulders. On first seeing the elephants which have been introduced by Government at Port Blair, the aborigines at once called them *û'chu*, in allusion to this legend, and it is the name ever since adopted by them in speaking of these animals.

used in the manufacture of their turtle-harpoon lines, nets, &c., it is said that *Pū-luga-* commanded *tō-mo* never to make use of it as fuel when cooking a turtle, though he might burn it when pigs or other animals were being prepared for food; a warning was also given him that a severe punishment would follow disobedience in this particular, for the males found transgressing would have their throats cut, while the females would be deprived of their breasts; if the offence were committed by day, the carrying out of the sentence rested with *chān'a .bō-do-*, or, if by night, with *mai'a .ō-gar-*. On one occasion, at night, shortly before the Deluge (when the *tō-mola* appear to have been a very depraved set), they were guilty, among other enormities, of disregarding this injunction, whereupon *mai'a .ō-gar-* descended and inflicted the threatened penalty.

33. The legend regarding the origin of the evil spirits known as *chōl-* is as follows:—Their ancestor, *mai'a .chōl-*, one day stole a pig which had just been captured by *mai'a .kōl-wōt-*, and climbed up into a gurjon-tree with his prize. Now *mai'a .kōl-wōt-* was remarkable for his great strength, and being enraged, determined to revenge himself; he thereupon planted a number of spikes all round the tree in which the thief had taken refuge, and then proceeded to force it into the ground. On finding that, if he remained where he was, he must inevitably be buried alive, *mai'a .chōl-* sprang off the tree, and thereby met a more terrible fate, for he was impaled on the spikes, and perished miserably. His disembodied spirit did not pass to *chā-itā'n-* (Hades), but took up its abode on the invisible bridge, where, by *Pū-luga's* orders, numbers of his descendants were afterwards sent to join him, in the form of black birds with long tails.

34. Another curious fable is told to account for a drought from which their early ancestors suffered: it relates that once upon a time, in the dry season, a woodpecker discovered a black honeycomb in the hollow of a tree; while regaling himself on this dainty he observed a toad eyeing him wistfully from below, so he invited him to join the feast; the toad gladly accepted, whereupon the woodpecker lowered a creeper, giving instructions to his guest to fasten his bucket (*dā-kar*<sup>1</sup>) thereto, and then to seat himself in it, so that he might be drawn up. The toad complied with the directions, and the woodpecker proceeded to haul him up; but just when he had brought him near the comb he mischievously let go the creeper, and his confiding and expectant guest experienced an unpleasant fall. The trick so exasperated him

<sup>1</sup> *Fide* Appendix B, item 13.

that he at once repaired to the streams far and near in the island and drained them, the result of which was that great distress was occasioned to all the birds, as well as to the rest of the animate creation. The success of his revenge so delighted the toad that, to show his satisfaction, and to add to the annoyance of his enemies, he thoughtlessly began to dance, whereupon all the water flowed from him, and the drought soon terminated.<sup>1</sup>

*Explanation of Plates VIII and IX.*

PLATE VIII.

Fig. 1.—Male and female adults, showing profiles, together with the mode of wearing the bone, wooden, and other necklaces, &c., and the character of the ordinary tattooing marks on trunk and limbs.

Fig. 2.—The late Chief of Rutland Island (*mai'a*, alias "*mūnshī*," *bī'ela*), who died in April, 1877. To the very last he proved most useful to us in recapturing runaway convicts, and in exerting his influence on our behalf with his countrymen, whenever called upon to do so.

PLATE IX.

Fig. 1.—Five youths equipped for a journey: commencing at the left; No. 1 is carrying a bucket (*dā'kar-*), holding a pig-arrow (*ē'la lā'kà lū'pa-*) and wearing a garter (*tā'chō'nga-*), *Dentalium octogonum* waistbelt (*gar'en-pē'ta-*), and *Pandanus* leaf head-dress or chaplet (*ij'i-gō'nga-*). Near his feet is lying a bundle consisting of food, wrapped in large leaves; near No. 5, who is holding a pig-spear (*ēr-dū'tnga-*), and carrying a nautilus-shell cup (ornamentally painted) in his hand, and a bundle on his back, is a cooking pot (*būj-*) in its wicker-work cover (*rā'mata-*). A sleeping mat (*pā'repa-*) is suspended behind the two central figures who, with No. 2, are holding bows (*kā'rama-*) and pig-arrows (*ē'la-*). No. 1 is a member of the *ōko-jū'wai-* tribe, Nos. 2, 3, and 4 belong to the *ā'kà-bō'jig-yā'b-*, and No. 5 to the *bal'awa-* tribe. (*Vide* Plate VI).

Fig. 2.—The same five individuals in front of a *chàng-tō'nga-* (hut). The recumbent figure shows the ordinary posture

<sup>1</sup> "The story of a flood or deluge is, it may almost be said, universal in savage mythology . . . . The Australians make a big frog the cause of the Deluge; he contained all the waters in the world, an eel made him laugh; thus the flood gushed out and drowned the majority of living things" (*vide* "Biblical Traditions and Savage Myths," reviewed in "St. James's Gazette," July, 1881).

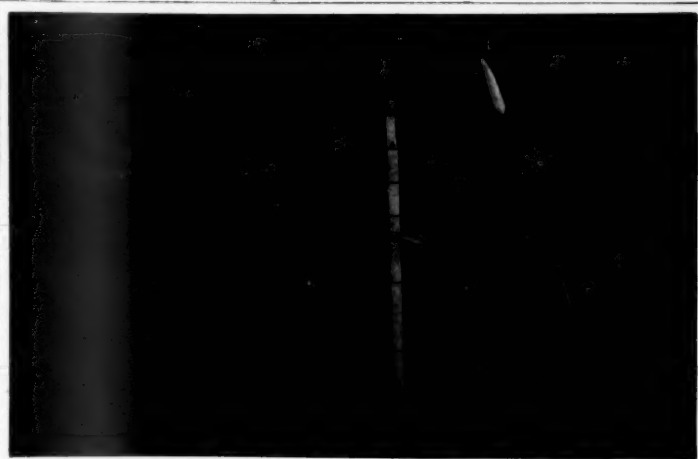


FIG. 1.—ANDAMANESE EQUIPPED FOR JOURNEY.

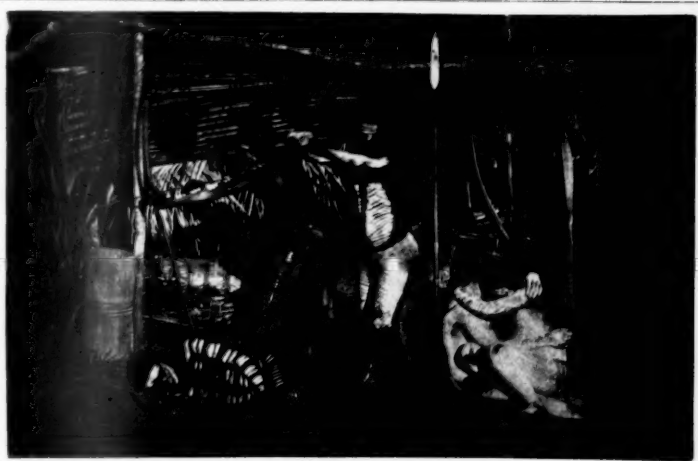


FIG. 2.—ANDAMANESE SHOOTING, DANCING, SLEEPING,  
AND GREETING.





in sleep. Those above him are shooting and dancing respectively, and the two on the right who are in mourning attire, represent the attitude of relatives on meeting and weeping together after a more or less lengthened separation. The first three mentioned are ornamentally painted. Just above the heads of the two figures on the right is the small grating called *châ'pa lî tâ'ga-* (or *yât leb tâ'ga-*), on which spare food is preserved above the fire. The various implements and utensils in ordinary use are also shown, *e.g.*, bows, arrows, pig-spear, bucket, basket cooking-pot, hand-net, sleeping-mat, &c.

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MARCH 21ST, 1882.

Major-General PITT-RIVERS, F.R.S., *President, in the Chair.*

The Minutes of the last meeting were read and confirmed.

The following presents were announced, and thanks voted to the respective donors :—

FOR THE LIBRARY.

- From W. WHITAKER, Esq., B.A., F.G.S.—A Handbook to the Courts of Natural History at the Crystal Palace. By Dr. R. G. Latham and Prof. Edward Forbes.
- From the AUTHOR.—Social History of the Races of Mankind. By A. Featherman.
- Permanence and Evolution. By S. E. B. Bouverie-Pusey.
- Die Arier. By Dr. Theodor Poesche.
- From the MAGYAR TUDOMÁNYOS AKADEMIA.—Gazette de Hongrie. Nos. 34–82.
- From the ACADEMY.—Atti della R. Accademia dei Lincei. Vol. VI, Fas. 7.
- From the SOCIETY.—Bulletin de la Société Impériale des Naturalistes de Moscou, 1881. No. 2.
- Journal of the Society of Arts. Nos. 1529, 1530.
- Proceedings of the Royal Society. No. 218.
- Transactions of the Asiatic Society of Japan. Vol. XI, Part 3.
- From the EDITOR.—“Nature.” Nos. 645, 646.
- Revue Scientifique. Tom. XXIX, Nos. 10, 11.
- Bulletino di Paletnologia Italiana. Vols. I–IV.

The following new members were announced :—

FRANCIS ARCHER, Esq., WILLIAM A. L. FOX-PITT, Esq., and W. E. MAXWELL, Esq.

Mr. WORTHINGTON G. SMITH exhibited a measured transverse section through 300 feet of the Palæolithic Floor of the Hackney Brook near Stoke Newington Common. He also showed a collection of ovato-acuminate implements, scrapers, flakes, and nuclei from the same spot.

The PRESIDENT read a "Note on the Distribution and Varieties of a Padlock," illustrating his remarks by an extensive collection of ancient and modern locks.

Mr. F. G. HILTON PRICE exhibited some ancient Roman Locks, and explained their construction in further illustration of the President's remarks.

Mr. J. E. PRICE and the Rev. H. WINWOOD also made some observations bearing on the subject of the President's communication.

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The following paper was then read by the author :—

*On the RELATION of STONE CIRCLES to OUTLYING STONES, or TUMULI, or NEIGHBOURING HILLS, with some Inferences therefrom.* By A. L. LEWIS, F.C.A., M.A.I.

DURING the last fifteen years I have paid much attention to rude stone monuments, and have visited and measured nearly all that exist within 200 miles of London, and some at greater distances. I have from time to time made remarks upon these structures before various learned societies, in the course of which I have been led to dwell particularly upon the references to various points of the compass which I have found in the circles I have examined, and I have thought that it might now be well to put together the whole of the details observed in a tabular form, even at the risk of appearing to repeat myself unnecessarily, so that all the facts and views mentioned in different papers read by me at different times and places, may, so far as they relate to the particular questions I am about to deal with, be brought together in a convenient form for consideration.

The table includes 18 circles, none of which have any reference to the north, 15 may have reference to the north-east, 3 to the east, 7 to the south-east, 4 to the south, 6 to the south-

west, 2 to the west, and 4 to the north-west. That is to say, 15 pointed, more or less exactly, to the sun's rising point at the longest day, 7 to rising point on the shortest day, 6 to his setting point on the shortest day, 4 to the noon point, and but few, and those doubtfully, to any other point. Whether, therefore, we give all points the benefit of every doubtful case, or whether we strike out all the doubtful cases, it seems clear that the builders of the circles had the north-east much more in their minds than any other point of the compass. With regard to the three circles in which I did not find a north-easterly reference, I may say there was not one in which it was not very likely to have been present in the first instance, but subsequently destroyed; on the other hand, I may have missed some neighbouring hills, at other points than the north-east, because my attention was not attracted to them when I first began to investigate these matters. I should say further that, though I have named only the eight principal points of the compass, the objects classed under each are not precisely in that, or in the same direction, but are nearer to it than to any other of the principal points. I shall, however, be able to show you other instances of similar differences, and I may say, once for all, that I have no great belief in extreme astronomical or other accuracy in connection with rude stone monuments.

My attention was first drawn to the connection of the circles with the north-east, by the well-known instance of Stonehenge, which has been authenticated by an innumerable cloud of witnesses; but I am not aware that any other writer has applied the principle to any considerable number of circles, if at all, or has investigated the matter of reference to other points of the compass; I feel justified, however, in now asking you to accept it as a settled fact, and as the first point to be borne in mind, that there is in the circles, south of the Humber at least, a much greater reference to the north-east than to any other point.

I will now mention some other ancient structures, which present a special reference to the north-east. The Rev. W. C. Lukis tells us that the lines of Carnac, in Brittany, run north-easterly from a circle, while those of Erdevan run north-westerly, but from their west end a single line runs north-north-east to a distance of 617 feet. The area of the north-east socket stone of the Great Pyramid is equal, roughly, to the sum of the areas of the other three, the next in size is the south-west socket, then the north-west, and last the south-east. Maurice, in his "*Indian Antiquities*," tells us that the gates of the temples of Mithra were placed at the north-east, and Dr.

Priestley says all the heathens contrived their temples so that they should pray with their faces towards the east.

The late Dr. Inman considered the monument of Hagiar Kim, at Malta, to be a Phœnician temple, on evidence quite different from that which I am now submitting to you; but it is a curious coincidence that the chamber selected by him as the holy of holies, has a most remarkable connection with the north-east (the full particulars of this may be found in "*Anthropologia*," p. 18, *et seq.*). Herodotus (*Euterpe*, cxxi) says of two statues in the temple of Vulcan, at Memphis: "One of these looks to the northward, and is adored by the Egyptians under the name of summer; the other, facing to the south, is altogether neglected, and goes by the name of winter." Mr. Mortimer has also found a dwelling on the Yorkshire Wolds with a grave outside it towards the rising sun, the whole being covered by a tumulus.\* Here we have a number of examples from miscellaneous and independent sources, showing that there were in certain ancient structures special references to the north, north-east, east, and south, and that those references were designed in connection with different periods of the year, and with sun-worship.

I will now mention some similar cases which have been handed down to our own times, and give some instances of the use of circles for worship or sacrifice. A correspondent of the "*Daily News*," describing, in 1872 (*D.N.* 7th January, 1873), the temples of the state religion of China, which, as he says, is not Buddhism, but a compound of phallic, sun, and nature worship, tells us that at the south of Peking there is a temple of heaven, where sacrifices are offered at the winter solstice; that at the north of Peking there is an altar of the earth, where sacrifices are offered at some other period; that at the east of Peking there is an altar of the sun, where sacrifices are offered at the vernal equinox; and that at the west of Peking there is an altar of the moon, where sacrifices are offered at the autumnal equinox. Mr. Thoms, in his work on "*Ancient Chinese Vases*," says: "The ancients, it is said, frequently offered sacrifice. When they made their offerings to heaven it was on a round eminence, when to the earth it was on a square eminence, remote from the capital. When offerings were presented to the sun it was observed in the royal palace, when to the moon it was in the Ya-Ming (splendid night) apartments of the palace, and to the stars in the Yew-Yang apartments, so that each had a temple or apartment set apart for the offerings where their aid was solicited. The offerings accorded with the particular season of

\* See his paper ("*Journ. Anthropol. Inst.*," vol. xi, p. 472: '*On Ancient Dwellings in the Yorkshire Wolds.*')

the year." It is worthy of note that the altar of the sun at Pekin is to the east, and that the winter altar is to the south, and that the Egyptian winter statue mentioned by Herodotus, as quoted just now, also faced to the south. In our own country there are dolmens and "coves" which were never, in my opinion, covered with earth or used for sepulchral purposes: these generally face between south and east, and may well have served as winter altars; such "coves" are noted in my table as existing in the great temples at Avebury and Stanton Drew, and possibly at the Roll Rich, and if devoted, as I infer, to winter worship, while the other parts of the groups of stones were devoted to summer worship, each of these groups would have had a completeness which as yet has hardly been suspected, but which confirms the probability of their having been constructed for places of sacrifice. In Chaldea, the different quarters of the heaven appear to have been assigned to different gods: to Anu as the sun, Hea as the earth, Bel, Nebo the eastern sun in the height of heaven, Nut and others (Prof. Sayce in "*Proc. Soc. Bibl. Arch.*"), and sun-worship undoubtedly formed a large part of the basis both of Chaldean and Egyptian religion. Colonel Forbes Leslie tells us that in Western India, on the table-land above the ghauts, a Hindoo fane, in which a cock had recently been sacrificed to Betal, consisted of twenty-three small stones, placed in a circular form at equal distances; one to the east was moved 12 feet back, three smaller stones were outside, and to the south-west a single stone, but no opening. Mr. Walhouse also mentions a circle on the Nilgiri Hills, with a smaller circle to the east of it ("*Journ. Anthropol. Inst.*," vol. vii, p. 43). Here again, in India, which, though so distant, is connected with us in so many ways, ancient as well as modern, we find stone circles used for sacrifice, and having a reference to the east, in which quarter the summer sun rises there, and not, as with us, in the north-east; nor are these the only notices of circular and open temples. Colonel Meadows Taylor has told us that large rocks with circles round them are used as places of sacrifice by Indian shepherds. Maurice ("*Indian Antiquities*," p. 158), says all ancient temples of the sun and Vesta, or elementary fire, were circular, the adytum in which the sacred fire blazed was constantly of an egg shape. The Arabs, near the first cataract of the Nile, worship, according to a writer in the "*Academy*" (18th November, 1876), in circles of stones 4 or 5 feet high, on the tops of hills; these are put together with or without mortar, and generally contain fragments of broken drinking jars, and a shallow earthenware pan in which incense has been burnt. Pausanias also refers to circles of great stones in which

the mysterious rites of Demeter were performed. Inigo Jones, writing of Stonehenge, says: "The Thracians used to build temples dedicated to Sol of a round form, open in the middle, and also without a roof. By the form or roundness thereof they signified the sun's figure; by making them open and roofless they expressed his surmounting and dilating light equally to all things." Mr. John Hogg, M.A., F.R.S., quotes various authorities to show that obelisks signify the rays of the sun, and this would be equally applicable to any other upright stones, and a circle of such would therefore represent the sun surrounded by rays.

The Prophet Ezekiel saw "at the door of the temple of the Lord, between the porch and the altar, about five and twenty men with their backs toward the temple of the Lord, and their faces toward the east; and they worshipped the sun toward the east" (viii, 16).

I must now remind you of a few instances in which observances, particularly by fire, of midsummer and other ancient festivals have descended to our own day and in our own country, as well as elsewhere. At Logierait, in Perthshire, burning faggots were carried in procession, and at Penzance, in Cornwall, fires were lit on 23rd and 28th June, and people ran about with torches, two holding up their hands, while others passed underneath. Baal fires were lit in Aberdeenshire at Halloween (old style), and at Beltane as lately as 1864 and 1865, and at Balmoral up to last October, while as long ago as the eleventh century, Cnut thought it necessary to forbid the worship of fire. The Sardinians go, on St. John's or Midsummer Eve, to church in procession, feast on eggs and herbs, light fires and join hands over them; in Brittany religious processions have taken place at or near midsummer, in which an image of the sun was carried by the priests. St. John's or Midsummer Day is also a great day with the Freemasons.

I think I have now shown—

1. That our stone circles have special references to various points of the compass, and notably to the north-east.
2. That other structures, both ancient and modern, had similar references, which we know arose in connection with times, and seasons, and various forms of nature worship and that the "eastern position" was particularly used in sun worship in countries where the sun rises in the east, at the time that it rises here in the north-east.
3. That practices connected with nature worship, and



especially with fire and sun-worship, have come down to our own times and in our own country.

4. That circular buildings and open circles have been and are used for worship of this kind.

There is also evidence, too bulky and too well known for me to reproduce here, that many practices and superstitions, some of them connected with sacrificial circles and stones in India, are common to England, to India, and to countries between them (*see* Colonel Forbes Leslie's "Early Races of Scotland"), and I submit that it is a fair deduction from these facts that our own circles were used for solar worship.

This deduction having been duly noted, I will ask you to consider another class of temples which have a special reference to the east and north-east, and which I have purposely avoided mentioning until now: I mean our own churches. It is well known that English churches stand, as a rule, east and west, the altar being at the east end, or, where the church cannot be built east and west, it is placed north and south, the altar being at the north end; the foundation stones of churches used always to be laid at the north-east angle ("Discrepancies of Freemasonry"); and when the Prince of Wales laid the foundations of Truro Cathedral in strict masonic fashion, there were two stones laid, one of which was a north-east stone. Here we have most singular and unmistakable references to the east and north, and above all appearing, as it were, like a palimpsest through and between these to the north-east; this extends also, though with a slight local difference, to the ancient Irish churches, which were invariably placed east and west, and always had an east window and a west door; the difference is that in Ireland there were no windows to the north, and that few burials were made on that side, and those mostly of still-born children, &c., which may be collated with the absence of any reference to the north in the stone circles.

Now whence do we derive this peculiar regard in our churches for the east, the north, and the north-east? We expect, as a matter of course, to find that any religious observances of this kind come from Rome, but this at least does not. The Roman and Italian churches and altars stand, as I am informed, in all sorts of positions, and any Londoner may see for himself, as regards the Romish churches in Hatton Garden, Duncan Terrace, the crypt in Ely Place, and Moorfields, that, although the buildings stand about east and west, the high altars are all at the west and not at the east; the English did not therefore borrow the position of their altars from the Romans.

There is yet another point in common between the British

circles and the British and Gaulish churches. I have mentioned that although the circles have a special reference to some point between the north and east, that point is not always the same point, and this again is the case with the churches. M. Savy, in a note on the "Orientation of Churches," read before the Congrès Archéologique de France, 1855 (p. 276), remarks that, although ecclesiastical rules provide that the long axis of churches should run due east and west, the apse being at the east, and that the plans should be laid before the Bishop of the diocese before building, these rules do not seem to have been followed in churches which he had examined, and he names eight cathedrals and churches in Rheims, Chalons, and Lepine, the axis of which is diverted to the north of east to the extent of from  $12\frac{1}{4}$  to  $34\frac{3}{4}$  degrees (the average being  $21\frac{3}{4}$ ); he points out that none of these incline to the south of east, but is unable to offer any explanation, unless it may be the formation of the ground, which might explain one case, but could hardly explain eight. In February, 1879, the Royal Institution of British Architects discussed the deflection of the axis and choir of old St. Paul's to the north of east, as shown by some remains then recently discovered. The President, Sir C. Barry, thought it might typify the leaning of the Saviour's head on his shoulder; the Rev. Mr. Webb doubted whether it were not accidental; Mr. Penrose (architect to St. Paul's) said there was a deflection to the south of east at Wisbeach Church, and he thought the deflections were made to improve the prospect in the churches. Here then we have it as a fact beyond dispute that the choirs of English and French churches, instead of always standing truly east and west, frequently stand in north-east and south-west direction, and we find that the best architects can give no satisfactory explanation of this arrangement. I explain it by the supposition that it is derived from the stone circles, and that the circles had this special reference to a quarter between north and east because they were devoted to solar worship.

There are many facts which this theory fits better than any other, and there are some theories which do not readily explain the facts I have brought out; I think it will be admitted that the coincidence I have shown between British and Gaulish rude stone monuments and churches is too close to be accidental; either the churches got their north-east reference from the circles, or the circles got it from the churches, or both got it from the same source. Now we have had a theory started which makes the circles to be of later date than the introduction of Christianity, and to be burial places for men slain in battle; but this theory does not account for the outlying stones; indeed, its learned author confesses that they are a mystery to him, and

why indeed should a mere memorial to men slain in battle adopt this peculiar ecclesiastical notion, and that in such a way as not to be recognisable without a certain amount of research? I consider, therefore, that on this ground alone the circles may be held to be earlier than the churches, and I may add that the articles found in and about rude stone monuments as a whole show them to be prior to the introduction of Christianity. The circles were, however, undoubtedly used occasionally, though not always, for burial, and, says Mr. Fergusson, "except the Jews, who seem to have buried their kings close to" (not inside) "their temples, I do not know of any people in ancient or modern times who did so, and we certainly have no hint that the ancient Britons were an exception to this universal rule." Whence, then, did Christians derive this practice? I believe they derived it from the Britons, and from their practice of burying in and about their temples, and that this gives us yet another link between the circles and the churches. In Scotland, indeed, circles are still called kirks, and churches "clachan," or stones.

In the churchyard at Rudston, in Yorkshire, is a menhir 25 feet high, which stands 13 feet from the buttress at the north-east corner of the church. Here we have a stone in close connection with a church, and the north-east reference between them maintained. This fact is stated by the incumbent of the parish, the Rev. P. Royston, who says in explanation: "It was the custom with the heathen to lay the foundation stone of any or rather every temple at the north-east corner; their reason for doing so was that the Egyptian astronomers taught that at the creation of the world the sun rose in Leo, and admitting this notion was got up when the constellation was situated in the north-east, at the rising of the sun, this circumstance will naturally, in accordance with the Egyptian mode of worship, induce the custom of commencing magnificent edifices at the north-east corner in imitation of that glorious luminary supposed by the Egyptians to be the supreme architect of the world."

Many years ago, it was generally thought that our circles were Druidic temples; this conclusion was no doubt arrived at without any direct evidence being obtained, or perhaps obtainable in its behalf, and by a natural reaction, any one holding that theory has, of late years, been thought little better than a lunatic. Yet how stands the best evidence that can be got? There is every reason to believe that the circles were erected in the Druidic period, and that they present features only explicable on the supposition of their being devoted to solar worship. It is quite certain that the Druids were sun-worshippers, and

that they had the power and the will to suppress every worship but their own: is it then so absurd to attribute the circles to the Druids? I think not.

I now want to show, in conclusion, how I think the connection between the Druidic and Christian temples arose.

It is a matter of history that western Christianity took its first firm root in Gaul and Britain, just the countries where Druidism reigned supreme, and that it only succeeded in doing so by accepting a host of practices and superstitions of which this north and east reference of its places of worship was probably one; it is known to have been a recognised policy of the early missionaries in these countries to accept as much as could not be easily suppressed of the local worship and superstitions, and to give them what was called a Christian signification. Dr. Priestley (*"Corruptions of Christianity"*) says: "All the heathens contrived their temples so that they should pray with their faces towards the east; this was introduced into Christian worship about the time of Jerome, though it was not then generally approved of. Pope Leo the Great condemned this custom because it was much used by the Manichæans," and again Pope Vigilius ordered, about 536, that those who celebrated mass should always direct their faces to the east. Christmas, he says, was observed in the fourth century, Easter and Whitsuntide earlier, the festivals of the Apostles, &c., not till the time of Constantine or later. Dr. Priestley says also: "With respect to the spiritual power in general the Popes derived much advantage from the ideas of the northern nations in their state of paganism; for they considered the Bishop of Rome in the same light in which they had before done their Archdruid, and transferred to him that boundless reverence with which they had been used to regard the other; hence the force of the papal excommunication which, as under the Druids, deprived a person of the common rights of humanity." This system of adopting, under a so-called Christian aspect, pagan sites, rites, and ceremonies was approved by contemporary Popes, and was afterwards extensively followed in the new world. I have also an apparent instance of it from the East. The highest peak of Mount Eubæa was the site of a chapel dedicated to the prophet Elias, which occupies the area of a megalithic temple fortress supposed to have been sacred to Helios the sun-god (*"Builder,"* 15th December, 1877); the transition from Helios to Elias is very simple, and we have here also a megalithic temple associated with sun-worship.

It was afterwards discovered that this system of comprehensive toleration, or rather assimilation, had its disadvantages, and we find that the Councils of Arles 452, Tours 567, Nantes, and also the Archbishop of Bourges in 584, Childebert in 554, Carloman

in 742, and Charlemagne condemned superstitions regarding stones, fountains, trees, &c., and enjoined their destruction (Abbe Voisin, *Materiaux, &c.*, 1875, p. 86); this also places the stones just in the pagan period immediately preceding the introduction of Christianity.


As a writer in "Good Words" (Rev. H. Wace, October, 1878) well puts it, "Christ at the beginning of the fourth century was, to the world at large, simply the object of the worship of a persecuted sect; at the end of the century He is recognised publicly by the highest authority of the empire as the Divine Lord of all." This recognition is well exemplified by penance submitted to by the Emperor Theodosius, in 390, at the instance of St. Ambrose, Bishop of Milan. This great difference in the status of Christianity at the beginning and end of the fourth century is indeed a well-known and unquestioned fact, but how is it to be accounted for?


Constantine the Great was proclaimed Emperor in Britain at York in 306, and immediately checked the persecution of the Christians; he depended for support very largely on his British and Gaulish forces, who had become impregnated with the mixture of Druidism and Christianity to which I have referred, and, as his power became consolidated, he not only tolerated this new faith, but made it the State religion.

Mr. John Hogg, M.A., F.R.S., says the sun "was the 'invincible guide and protector' of the Emperor Constantine before the year of our Lord 331, when he commanded the heathen temples to be closed; and Gibbon tells us that the devotion of Constantine was more particularly directed to the genius of the sun, the Apollo of Greek and Roman mythology, and he was pleased to be represented with the 'symbols of the god of light and poetry.' Indeed, ten years before (321), Constantine ordered the strict observance of Sunday, calling it then after his patron god, *Solis dies*, and he moreover placed upon his coins the legend '*sol invictus*.'"

Constantine probably acted as much from inclination as from policy in these matters, for, says Mr. Wace, "Constantine, according to Eusebius, proposed to unite under one form the opinion which all nations held of the Deity; Plotinus, the great master of the Neo-platonic philosophy, Porphyry, and Iamblichus, worked out an elaborate scheme which strove to embrace ancient forms of worship and of thought, but which culminated in the idea that in moments of ecstasy, and ecstasy to be produced by virtues similar to those of Christian enthusiasm, a vision of God might be attained."

While, however, this great Emperor was planning a scheme of universal religion, the details seem to have been left, as before,

to accommodate themselves somewhat to local customs and superstitions; the British system of orientation of churches prevailed in the Druidic countries of Gaul and Britain, but was not enforced in non-Druidic Rome. The Greek cross and the monogram Chr, of which it forms part, and which Constantine stamped on his coins, gave way to the distinctly pagan Roman cross as the power of Rome increased, yet in Gaul, and Britain more particularly, we find the right-angled Latin cross not unfrequently modified on vestments into a "Y" cross , which

appears to me to be another form of the mysterious government mark known as the "broad arrow," , both being probably derived from the Druids, who, according to Mr. Morgan, had a cross of three Divine letters or rays symbolizing the triple aspect of God, which was wrought in gold down the length of the back of the vestments of the Archdruid, and which would certainly have formed a very convenient and significant mark for sacred or royal property. Dr. Evans, indeed, says that although the "broad arrow" is a very ancient symbol, it has not been traced as a government mark earlier than the reign of Henry VII., but it must not be forgotten that that was the precise period of revival of a great number of Welsh and early British notions.

Returning, by way of conclusion, to Constantine, Dr. Priestley goes so far as to say that in his reign there was more learning in Britain than elsewhere; be that as it may, the aim of Augustine and his mediæval followers was so entirely to exalt Rome at the expense of all other nations that very insufficient weight has generally been attached to the influence which British views and forces exercised in the later Roman Empire.



LIST OF CIRCLES measured in Southern Britain, showing the nature and direction of any apparent references in them to external objects or points of the Compass.

Name.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
<i>Asbury</i> ... (from particulars from by Sir H. C. Hoare, confirmed as far as is now possible by my own observations).	...	"Cove" in northern inner circle, faced to N.E.	...	Avenue ran S.E. from great circle. "Cove" in S.W. avenue faced S.E. The smaller circles stood somewhat S.E. and N.W. from each other, with single stone at S.E. end of line through their centres.	Silbury Hill about S. from great circle.	Avenue ran S.W. from great circle.	...	<div>The smaller circles stood somewhat N.W. and S.E. from each other.</div> Doubtful.
<i>Arborea Ring</i> ...	...	"Cove" in centre faced apparently to N.E.	...	Entrance and stone against it.	...	Tumulus and bank leading to it.	...	Entrance.
<i>Stonsenge</i> ... (from Mr. Flinders Petrie's measure- ments, as well as my own.)	...	"Priar's Hecl," avenue, and stone on ditch in line of avenue to N.E.	<div>Large tumulus about 300 feet outside ditch (qv. any con- nection with circle).</div> Doubtful.	Stone on line of ditch and tumulus further south in line of ditch (these are in line with centre of circle and similar objects to N.W.).	...	...	...	Tumulus on line of ditch and stone further S. rather within ditch (these are in line with centre of circle and similar objects to S.E.).
<i>Roll-Rich</i> ...	...	"King stone" to N.E.	<div>"Five Knights" (qv. any con- nection with circle).</div> Doubtful.	<div>"Five Knights" are somewhat S. of E. from circle, but may have no con- nection with it.</div> Doubtful.	...	<div>"Five Knights" face south- westerly (but qv. any con- nection with circle).</div> Doubtful.	...	...

LIST OF CIRCLES, &c.—*continued.*

Name.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
<i>Stanton Drive</i> (from Mr. C. W. Dymond's measurements, as well as my own).	...	Line through centres of S.W. and great circles to "Hauterville's Quoit," N.E. of circle to N.E. of great circle and "Cove."	...	"Cove" faces S.E.	...	"Cove" at S.W. end of line running through centres of great and N.E. circles. S.W. from great circle.	Two stones in "Lower Tyr-ing" nearly W. from N.E. circle but of any connection.	Two stones in "Lower Tyr-ing," nearly N.W. from S.W. circle (q.v. any connection). "Cove" also somewhat N.W. from S.W. circle.
<i>Hurlers</i> (Cornwall) ...	...	The three circles are in a somewhat north-easterly line one from the other.	...	...	...	Two upright stones S.W. from central circle.	Two upright stones about W. from S.W. circle.	...
<i>Dance Maen</i> (Cornwall) ...	...	Small stone to N.E., also the "Pipers" (if connected with circle).	...	Two stones between S. and S.E. Doubtful.	{ Two stones between S. and S.E. Doubtful.	...	...	...
<i>Nine Maidens</i> (Botalack, Cornwall) ...	...	Possibly Carn Kenidjack or some part of it.	...	...	...	...	...	...
<i>Nine Maidens</i> (Boscawen un, Cornwall)	...	Central stone leans to N.E.	...	...	...	...	...	...
<i>Gidcligh</i> (Devon) ...	...	A small stone to N.E.	...	...	...	...	...	...
<i>Mount Murray</i> (Isle of Man) ...	...	Avenue winds round N.E. side.	...	...	...	...	...	...

LIST OF CIRCLES, &amp;c.—continued.

Name.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
<i>Penmaenmaer</i> ...	...	Two stones and three hills to N.E.	...	...	...	...	...	...
<i>Mitchell's-fold</i> (Shropshire)* ...	...	Single stone Stapely Hill and Hoarstone circle to N.E.	...	Doubt { Corndon Hill between S. and S.E.	Two stones and "Whetstone" to S.	...	...	...
<i>Hoarstone</i> (Shropshire) ...	...	Three hills to N.E.	...	...	...	Central stone leans to S.W., where are also Stapely Hill and Mitchell's-fold in line.	...	...
<i>Gorell</i> (Dorsetshire)* ...	...	...	...	...	Two stones to S.	...	...	...
<i>Nine Stones</i> (Dorset) ...	...	...	...	...	...	...	...	...
<i>Calderstones</i> (Lancashire) ...	...	...	...	...	...	...	...	...
<i>Wad Withins</i> (Derbyshire) ...	...	Doubt { Small lot of stones to N.E., possibly a hut circle.	...	...	...	...	...	...
Totals 18 ...	0	15 { 11 certain. 4 doubtful.	Doubt { Small lots of stones to E., possibly a hut circle. 3, all doubtful.	7 { 4 certain. 3 doubtful.	4 { 3 certain. 1 doubtful.	6 { 5 certain. 1 doubtful.	2, both doubtful.	4 { 2 certain. 2 doubtful.
N.B.—The particulars are all founded on my own observations, unless otherwise stated.								

\*See "Journ. Anthropol. Inst.," November, 1881.

## DISCUSSION.

Mr. PARK HARRISON thought that great uncertainty must always exist regarding the orientation of stone circles. If prominent or outlying menhirs were taken as indicators, one could never feel sure that some may not have been removed. Then, as to the eastern direction of churches: though many heathen customs were Christianised, and new meanings attached to them, there did not appear to be any evidence that the orientation of English churches was copied from British sun-temples, and a north-eastern direction is certainly not the rule with them. There was a long interval between the date of the stone circles and the time of Jerome, during which a number of different cultes had been introduced by the Romans, and adopted by the Romanised Britons; and when Christianity was introduced, the existing temples, many of them unconnected with sun-worship, were converted into churches. The eastern direction of English churches, like the earlier British way of calculating Easter, and a peculiar form of the clerical tonsure appear to have been introduced by Eastern missionaries. It was the kirks that were called "stanes" in Scotland, as places of meeting; the terms were not convertible.

Mr. WALHOUSE observed that, with regard to the orientation of churches, he believed the mediæval custom was not to build them due compass east, but to that point in the east where the sun rose on the day of the Saint to whom the church was dedicated. On the point of the deflection of the chancel from the line of the nave, very observable in some old churches, as at Wellow, in Somersetshire, he believed it was intended to typify the drooping to one side of our Lord's head on the Cross. With reference to outlying stones to the eastward of stone circles, he had seen a striking instance at the remarkable site known as the "Stones of Clava," about  $1\frac{1}{2}$  mile from the field of Culloden, a few miles from Inverness. There are three principal large circles, closely contiguous, the great stones arranged at equi-distant intervals, with mathematical accuracy; and at 200 or 300 yards distance to the east, in another field, there is placed a single large upright block, much too far off to have formed any part of the circles, but evidently connected with them.

The Rev. H. WINWOOD wished to emphasize the question of a former speaker as to the indications of a circle pointing in any particular direction. During a recent visit to the Snowdonia district, he had observed a great many stone circles scattered over the hills, facing in all directions—north, east, south and west, according to the slope of the ground; if there was any particular point to which they faced more particularly, he thought it was the south and south-east, for a direction favourable to the living would be equally so for the dead. With regard to the other three great circles with which he was well acquainted, *i.e.*, Stonehenge, Avebury, and Stanton Drew, he inquired what evidence there was of their direction being north-east. As to Stonehenge, perhaps the

position of the "Friar's Heel" in regard to the so-called "Altar Stone," might possibly favour this view, especially in the mind of those who had watched the midsummer sun rise over the "Heel," but the remaining two he thought could not be cited as an example of any such intentional direction. The revival of the Druid theory was also a point on which he sought enlightenment from the author who had collected his facts with so much industry. As to the connection of circles and churches, and the statement that the Scotch called their circles *kirks*, he had always understood that the word *church* had quite another derivation.

Mr. LEWIS said, in reply, that the nature of the reference to the various points of the compass was shown in detail in the table attached to the paper, and that at Stanton Drew the reference to the north-east, in the relative portions of the circles and outlying stones, was very remarkable. The possible destruction of outlying stones applied as much to one point as to another, so that if a sufficient number of circles were dealt with, it was not necessary to take it into account; and he thought eighteen circles gave a sufficient average, or he would not have troubled the Institute on the subject at all. He had brought evidence to show that the north-eastern direction in churches existed more commonly in England and France than was generally supposed, and the north-east was also particularly recognised by laying the foundation-stone in that direction. The typifying of the drooping of the Saviour's head he looked upon as a very far-fetched Christian gloss, and the placing the chancel window so that the sun should shine through it on the saint's day was clearly a remnant of sun-worship, as indeed was the whole system of placing the church in any particular position, without regard to, or, as frequently happened, in opposition to the nature of the site; why else should not the churches be placed in any direction whatever, as they were in Rome? It would be unlikely in the nature of things that any positive evidence should be found that the orientation of the churches was derived from that of the circles; but the facts he had mentioned appeared to him to fit together, like the pieces of a dissected puzzle, in one way and no other, so that if there were not a mathematical, there was what he might almost call an ocular demonstration of the truth of his views, and there was certainly no direct evidence of the orientation of the churches having been derived from any other source than the one he had suggested. The calling the churches stones and the stones churches, by the Scotch, was not mentioned by him as elucidating the derivation of the word *church*, but as showing that the two things were at some time or other considered practically the same.

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The following paper was read by Mr. J. E. PRICE :—

EXCAVATIONS of TUMULI on the BRADING DOWNS, ISLE OF WIGHT. By JOHN E. PRICE, F.S.A., and F. G. HILTON PRICE, F.S.A., F.G.S.

[WITH PLATE X.]

THE excavation of the Roman buildings at Morton, near Brading, in the Isle of Wight, has up to the present time not resulted in any discoveries of a character which could with propriety claim any especial recognition in the proceedings of the Institute; but as our Journal occasionally admits archæological communications (useful often for purposes of comparison), and moreover already contains descriptions of researches among the tumuli and grave-mounds of this country, it may be well to briefly chronicle the results of an examination which we had the opportunity of making last autumn, of some of the well-known barrows on Nunwell and Brading Downs. Our work at the villa being temporarily suspended, owing to the presence of the crops, and other circumstances, we availed ourselves of the kind permission accorded by Lady Oglander to investigate the various tumuli within the limits of her estate, several of which are in close proximity to the villa. The situation of those now excavated is one of the finest in the neighbourhood; it is on the summit of that picturesque range of hills which, extending across the middle of the island, runs more or less in an unbroken line from Culver Cliff to Freshwater Gate; upon the summit is the old road, the highway from Brading by Arreton to Newport, the commercial centre of the island; a liminary hedge marks one side of the ancient way, and near thereto the barrows, or rather such of them as remain, can be readily distinguished. Imperfect examinations have clearly been made from time to time, which, added to the gradual levelling of the soil and the steady operations of nature, have in many cases nearly obliterated the elevated sites, and to the unpractised eye many difficulties might present themselves as to the most desirable spots for excavation; and it is to be regretted that those who in former days explored these barrows have not published an exhaustive report of their investigations, partial in many cases, but sufficient to destroy, for historical purposes, many interesting features.

The largest tumulus, which is nearly circular, is about 60 feet in diameter and 5 feet high at the highest part. In the centre it is only 2 feet 6 inches. The site of this tumulus is marked upon the ordnance map and it is locally known as the "Punch Bowl," or "Devil's Punch Bowl," a designation which, as is well



known, has been often applied to barrows, and originated doubtless in the legends and superstitions which found favour with the country people in former days; the bowl or cup-like form being due either to the pernicious habit of explorers, when excavating tumuli, of excavating a shaft or pit in the very centre of the mound, with the expectation of dropping at once on the anticipated treasure, perhaps finding nothing and abandoning the work, or from the fact of the barrow having been raised over cists containing urns or interments by inhumation, which gradually perishing and giving way, led to a subsidence of the soil in the crown of the tumulus. There is a tradition current among the labourers on the estate that in this hollow portion of the "Bowl" a large stone formerly existed, that it was removed from its position by mischievous people, and sent rolling down the hill, and that, for some time after, it was to be seen near to a ditch or path adjoining Nunwell House. We instituted a careful search with one of the labourers, but was unable to trace the stone. It is possible that it had some association with the tumulus, and perhaps some significance as a liminary mark, or it may have been only placed there in recent times for the support of a staff or pole, the situation of the mound being one which might even be selected for a beacon. Both on the promontory at Bembridge and on that at Freshwater such beacons once existed, and in the midst of ancient sepulchres, around what is known as the sea-mark, a mass of masonry on Ashe Down, and visible miles away at sea, are congregated tumuli, no less than twelve of which were once partially examined by the Isle of Wight Philosophical and Scientific Society, and the results are recorded in vol. x. of the "Journal of the British Archæological Association."

Our examination of the "Punch Bowl" commenced in July last; we began by cutting a trench direct through the diameter of the mound, the width of the trench being about 3 feet. Cutting in this direction we were enabled thoroughly to explore the centre. Near to the junction of the upheaved soil, comprising many tons of chalk, with the surface of the ground, there appeared what may be described as a layer of charcoal, extending (as it would seem from its being again met with in the cross-cuts, subsequently made) throughout the circumference of the barrow. Associated with this layer of charred wood were several fragments of both human and animal bones, and scattered pieces of early British coarse sun-dried pottery. Traces of cremation were present, but the mound having been previously disturbed, nothing perfect or *in situ* was disclosed. We next proceeded with a trench in a southerly direction, extending from the centre to the edge of the tumulus, about 8 feet west of

this; another cutting was made, and here was discovered a skeleton of a child which Professor Flower has been kind enough to examine, and pronounces to be that of an individual about nine years of age. These remains, together with some of the pottery found, are exhibited. The body was in a contracted position; the position of the head pointing to the north-east has no especial significance, it having been clearly shown by barrow-diggers that there was but little rule in this respect. The skeleton was nearly complete, but the bones very fragmentary and decayed; near to it was found a small urn, or cup, of very early, but of coarse and crumbling pottery, and so fragmentary that but little has been saved. Among the relics appeared a primitive and interesting object, viz., the basal portion of the antler of a red deer through which a hole had been drilled transversely to the long axis of the horn. This artificial perforation is quadrilateral in shape, and intended doubtless for the reception of a handle. It measures  $6\frac{1}{2}$  inches in length, and the hole, which is 1 inch in diameter, is cut through it at 2 inches from the thickest end (*see fig.*).



Canon Greenwell and Mr. Franks, who have seen it, consider it to be a hammer of British make, and very rare. It is much to be regretted that it was injured by the excavators before they observed what was being thrown out of the trench. There were a considerable number of flint flakes taken out of these trenches, and some small fragments of British pottery, and a few animal bones, mostly splinters.

We should state that our trenches, north, south-east and west, were about 4 feet in width, also the inner circular trench, but the smaller cuttings were slightly less.

In the trench east and west, at a point about 12 feet from the east end, and at  $2\frac{1}{2}$  feet from the surface, resting upon a layer of charcoal, a bone pin, tooth of an ox, bits of pottery, and bones were found. Adjoining this spot a small earthenware cup of coarse British pottery, several flint-flakes, pieces of bone, and fragments of pottery were also discovered, but no indications of human bones were met with, notwithstanding great care was taken.

We next turned our attention to making a circular trench

through the highest portion of the mound ; measuring from the principal trenches already made, we commenced a trench 3 feet wide, at 12 feet from the east end, 14 feet from the north end, 18 feet from the west end, and 9 feet from the south end. Throughout this excavation, the black line was distinctly visible at a depth of about  $2\frac{1}{2}$  to 3 feet from the top. Finding nothing particular in this circular cutting beyond a few flakes and bits of pottery, a few extra sections were cut on the south side with a view of ascertaining whether any secondary interments had been made, this side being quite near to the old road, which probably dates from British times.

The first section, 3 feet wide, was made 13 feet south of the main east and west section on the east face, the second was 15 feet 6 inches from that, and the third was 8 feet west of the north and south section. These trenches were all dug into the inner circle without any results.

Another trench was cut in the inner circle inwards towards the centre, from the point 7 feet 8 inches west of the north and south section, extending for a distance of 6 feet without any results.

At  $2\frac{1}{2}$  feet from the surface of the mound there was a uniform layer of earth much mixed with fragments of charcoal.

This mound bears evidence of having been opened from the north side, due north and south towards the centre, when probably the primary interment was removed. The original excavator did not cut it through on the south side.

Finding nothing more, we restored the mound.

A smaller tumulus was next opened ; it is situated 45 feet east of the "Devil's Punch Bowl." We made a section east and west 35 feet in length, and a cross section north and south 19 feet 6 inches ; the trenches were 6 feet in width through the mound ; a large number of flakes were found beneath the turf within a foot of the surface. In the north and south section, on the south side of it, a handful of burnt bones was discovered. After making a deep excavation in the centre, and finding the ground had never been disturbed, we filled it in. The antiquities discovered in these mounds are deposited in the British Museum.

It would seem from these investigations that the burials referred to are of the British period, that is to say, they belong most likely to a time which may have been historical when the Romans began to colonise the land near Brading, and erected that extensive range of buildings which have been recently disclosed ; for there are no indications of the tumulus having enclosed any relics of the Roman period, indeed, it is singular that as yet no sepulchral memorials of this time have yet been met with in the vicinity of our work. We have yet to

discover the graves of some of the inmates of this vast establishment, which, from many indications found, was evidently occupied for generations. As a rule, the barrows in the Isle of Wight chiefly mark a transitional period, or rather the association between Romans and Saxons; for example, those upon Brook Down, Afton Down, Shalcombe and Chessell Downs, on Brightstone, also at Bowcombe Downs; and this especially applies to those which have been examined along the range of hills from Newport or Carisbrooke to Freshwater, a distance, say, of 12 miles. It would seem that the burial-places of the earlier races, of the Belgic tribes who as we know occupied the Isle of Wight, are more plentiful in the district we are now investigating, and this may be expected to be the case if we may view, as we now probably may, the old town of Brading and its immediate vicinity as marking the situation of the first occupation of Vectis by the Romans.

*Explanation of Plate X.*

Plan and section of the tumulus known as the "Devil's Punch Bowl," on Brading Down, in the Isle of Wight.

Mr. F. G. HILTON PRICE made some remarks in illustration of the paper, and the discussion was sustained by the Rev. H. WINWOOD and the PRESIDENT.

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APRIL 4TH, 1882.

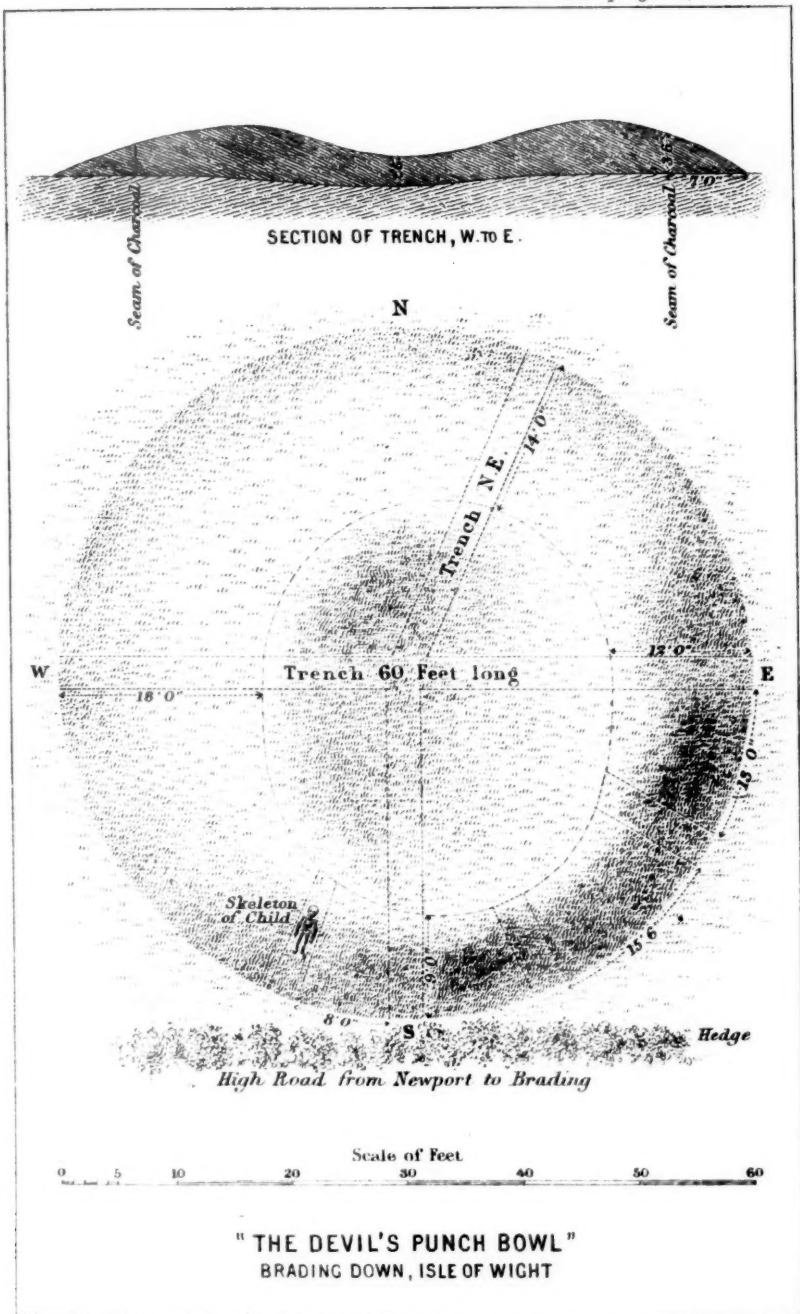
Major-General PITT RIVERS, F.R.S., *President, in the Chair.*

The Minutes of the last meeting were read and confirmed.

The following presents were announced, and thanks voted to the respective donors:—

FOR THE LIBRARY.

- From the AUTHORS.—Ueber einige Fossilien aus der Uitenhage-Formation in Süd Afrika. By Dr. E. Holub and M. Neumayr.  
 From the AUTHOR.—Report of the Third International Geographical Congress. Venice, September, 1881. By Lient. G. Kreitner.  
 From the SMITHSONIAN INSTITUTION.—Studies in Central American Picture-writing. By Edward S. Holden.  
 From the ACADEMY.—Atti della R. Accademia dei Lincei. Vol. VI, Fas. 8.







From the ASSOCIATION.—Journal of the Royal Historical and Archæological Association of Ireland, July, 1881.

— Journal of the East India Association. Vol. XIV, No. 1.

— Proceedings of the Geologists' Association. Vol. VII, No. 4.

From the SOCIETY.—Proceedings of the Asiatic Society of Bengal, December, 1881.

— Journal of the Society of Arts. Nos. 1531, 1532.

— Proceedings of the Royal Geographical Society, April, 1882.

From the EDITOR.—"Nature." Nos. 647, 648.

— Revue Scientifique. Tom. XXIX, Nos. 12, 13.

— Matériaux pour l'Histoire de l'Homme. Tom. XII, liv. 12. Tom. XIII, liv. 1.

The election of EVERARD F. IM THURN, Esq., was announced.

The President exhibited an interesting series of large carvings and painted masks from New Ireland, upon which he offered some remarks.

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The following paper was then read by the author:—

*The PAPÛANS and the POLYNESIANS.*

By C. STANILAND WAKE, Esq.

THE peculiar geographical position occupied by the mop-headed blacks of New Guinea and the islands of the West Pacific, entirely cut off as they are from the apparently allied peoples of the African continent, has attracted much attention among anthropologists. Whether the Papûans or Papûas, as the tribes belonging to that race are called, are in reality nearly related to any of the African races, or what is their relationship to their neighbours in the Indian Archipelago or Australasia, has not yet been satisfactorily determined. A recent writer, Mr. A. H. Keane, who has specially studied the latter question, has indeed attempted to supply a classification of the Oceanic races, but the attempt is far from satisfactory. Mr. Keane divides these races into three types, based on the colour of the skin, which he describes as the dark type, the fair and brown or Caucasian type, and the yellow and olive-brown or Mongolian type. According to this classification, the dark type comprises the Negritos, the Papûans, the Australians, and perhaps the Tasmanians; the Caucasian type embraces the Eastern Polynesians, and also a continental branch; and the Mongolian type is represented among the Oceanic races by the Malayan peoples.<sup>1</sup>

<sup>1</sup> "Journ. Anthropol. Inst.," vol. ix (1880); and "Nature," vol. xxiii (1880), p. 199.

A radical objection to this classification is that the physical character on which it is chiefly based is of less importance than other characters, a generalization from which would require a different classification. Thus the hair, which is regarded by some anthropologists as a more important feature than skin colour, is woolly among the Negritos and Papûans, but smooth and straight among the Australians. Again, the Australians and Papûans may be described as full-bearded races, while the Negritos are absolutely beardless. Moreover, this dwarf dark race belongs to the short-headed division of mankind, but the true Papûans and the Australians are as distinctly long-headed. A classification on the basis of skin colour and hair would thus require the Negritos and Papûans proper to be associated. By the other characters referred to the latter must, however, be placed rather with the Australians, who differ from the other races named in the form of the hair, which connects the Australians with the Polynesians, who have themselves certain features in common with the Papûans.

It is with the relationship between the Papûans and the Polynesians that this paper is more especially concerned; and I propose first of all to consider the physical grounds on which Mr. Keane places those races in different divisions in his general scheme of classification. This is, as we have seen, chiefly based on complexion or skin colour. It is somewhat strange that Mr. Keane should refer to colour so prominently; as, when considering the objections to the placing of the Polynesians among peoples of the Caucasian type, he remarks that "the question of colour must anthropologically be regarded as altogether of secondary importance." There are black and dark brown Caucasians in different parts of Asia and Africa, and why not, therefore, brown Caucasians in Polynesia? <sup>1</sup> Mr. Keane may, however, mean only that his Oceanic Caucasians are brown, as distinguished from his fair continental Caucasians and the Papûans, and other peoples comprised in the division of dark types. But this is not an accurate statement of the facts, if the term "Papûan" is not restricted to the natives of Melanesia. Dr. Meyer says, as to the natives of New Guinea, that they present a great diversity of complexion, "shown in the transitions from the fair shades of the Malays to those of the true black Papûans."<sup>2</sup> Dr. Michlucho Maclay speaks of the natives of Astrolabe Bay as being decidedly Papûans, but as having light chocolate-brown skins.<sup>3</sup> Dr. Comrie declares that the natives of the south-east coast of New Guinea vary from rusty

<sup>1</sup> "Nature," vol. xxiii, p. 222.

<sup>2</sup> Cited in "Australasia," edited by Mr. Wallace, p. 446.

<sup>3</sup> *Ibid.*, p. 453.

black to a yellowish brown, the natives of the immediate neighbourhood of East Cape being, however, of a lightish brown.<sup>1</sup>

Finally, the Italian traveller D'Albertis affirms that the yellow race of New Guinea, "if not aboriginal, is at least the most ancient existing, and has spread over the greater part of the island, while the black appears to be restricted to certain points of the west, south, and north coasts."<sup>2</sup> According to this view, the true Papûans are yellow rather than black, in which respect they approach much nearer to the Polynesians than Mr. Kean's classification supposes. The complexion of the Polynesian peoples is, however, very variable. Dr. Topinard remarks that "according to some it is of mahogany colour, to others of a dull copper colour. M. Bourgarel says it is of a yellowish-olive hue, lighter sometimes than that of the Malays, especially at Tahiti. Jacquinot says it is generally tawny-yellow, mixed with more or less dark bistre."<sup>3</sup>

We may leave the question of colour for the present, as it is admitted to be anthropologically of secondary importance, and see to what other features Mr. Keane refers. The Malay word meaning "frizzly," which gives name to the Papûans, shows what has been considered the most prominent characteristic of the race. The hair of the Polynesians, on the other hand, is smooth, often curly and wavy. The long head of the Melanesian is referred to as proving that dolichocephaly is the distinctive mark of the Papûan type, whereas the skull of the Polynesian approaches brachycephaly.<sup>4</sup>

These are the chief physical grounds on which Mr. Keane affirms that the Papûans and Polynesians form absolutely distinct races, and I will now proceed to point out the weakness of his case. In the first place, it should be mentioned that, although the existence of a Papûan type and a Polynesian type may be admitted, it is by no means easy to say what are their special characteristics. Mr. Keane divides the Papûans into three divisions, namely, the Papûans proper, the Sub-Papûans West, or Alfuros, who inhabit the islands between Sumatra and New Guinea, and the Sub-Papûans East, or natives of Melanesia. Of these, the Alfuros are supposed to possess a large Malay intermixture, while the Melanesians, including the Fijians, show the presence of a strong Polynesian element. It is, however, among the long-headed Melanesians that Mr. Keane finds "the very purest specimen of the race," although he refers to two natives from the interior of North-

<sup>1</sup> "Journ. Anthropol. Inst.," vol. vi (1877), p. 106.

<sup>2</sup> "New Guinea," vol. i, p. 86.

<sup>3</sup> "Anthropology," p. 479.

<sup>4</sup> "Nature," vol. xxiii, pp. 221, 202.

west New Guinea, figured by M. Raffray, as representing "characteristic full-blood Papûan types."<sup>1</sup> M. Raffray's typical Papûans ought in this case to resemble the pure Melanesian type to which Mr. Keane refers, and which is represented by the extremely dolichocephalous mountaineers of Fiji. These islanders have been shown by Professor Flower to belong to the hypsi-stenocephalic type of Melanesia.<sup>2</sup> What is the case, however, with the typical Papûans of M. Raffray? This traveller says nothing as to their personal appearance, except that they had the short hair of the Arfak type, a statement which is confirmed by the portraits given of them.<sup>3</sup> M. Raffray would seem to regard all the natives of New Guinea met with by him as belonging to the same race, although differing among themselves sufficiently to form sub-families or types.<sup>4</sup> The Wosaonis whom he figures are not represented as having the long nose with pendent tip supposed to be characteristic of the Papûans. That the tribes belonging to this race exhibit much difference among themselves is almost universally recognised. Thus the mountaineers of the neighbourhood of Dorey, known as Arfaks, differ from the natives of Dorey in being taller and darker, and in having a more oval face and more aquiline nose.<sup>5</sup> Both of these tribes, however, belong to the same type as the inhabitants of the island of Mafor, which is supposed to have been the original home of the natives of the shores of Geelvink Bay and its islands.<sup>6</sup> This opinion is entertained by Dr. Beccari, who believes that he has found three types among the Papûans.<sup>7</sup> One, which he terms Oriental negroes, or primitive Papûans, but which does not exist as a separate race, is "dwarfish, with short woolly hair, skin almost or quite black, nose much depressed, forehead extremely narrow and slanting, and brachycephalic cranium." The second, which inhabits the greater part of the northern peninsula, and which Dr. Beccari considers typically Papûan, has a dolichocephalous skull with the general characters usually ascribed to the Papûans, that is, a flat forehead, and prominent brows, curved and high nose with prolonged tip, and large mouth with thick and pouting lips. The third type, that of the Mafu Papûans, is often distinguished by fine, even European, features, which the Italian traveller supposes to be due to a mixture of Caucasian or Hindoo blood. Signor D'Albertis, who visited not only Dorey but also the

<sup>1</sup> *Ibid.*, p. 202.

<sup>2</sup> "Journ. Anthropol. Inst.," vol. x (1881).

<sup>3</sup> "Le Tour du Monde," (1879), 1st Sem., p. 267.

<sup>4</sup> *Ibid.*, p. 274.

<sup>5</sup> *Ibid.*, p. 254.

<sup>6</sup> D'Estrey "La Papouasie," p. 148.

<sup>7</sup> Cited in "Australasia," p. 452.

south-eastern coast and the interior of New Guinea, also came to the conclusion that three distinct types exist among the Papûans. Those of Moatta, and of Kiwai Island at the mouth of the Fly River, have small round heads with low and very narrow foreheads, prominent eyebrows, and projecting jaws, resembling somewhat the primitive Papûans of Beccari. About 50 miles up the river, at Canoe Island, the natives have a different form of skull, very long and flattened at the top, with very retreating forehead and projecting jaws, evidently the same as the second type of Beccari. In the interior D'Albertis found that the natives had smaller heads, somewhat long, but not much flattened, the forehead being high and almost perpendicular. The eyebrows are not prominent, and the jaws but little projecting.<sup>1</sup> The peoples belonging to this type, which may be compared with the Mafu type of Beccari, are lighter coloured than the coast tribes, and D'Albertis states that they resemble in appearance and customs the inhabitants of the eastern parts of New Guinea. It is on this ground he concludes that "the black race is neither aboriginal in New Guinea nor yet the most ancient of its people."<sup>2</sup> The Italian traveller thinks the three types of Papûan skulls observed by him may perhaps belong to one series; but he obtained from the interior of New Guinea skulls which he states are quite distinct from those in his collection which constitute the three principal varieties. These skulls are "remarkable for their weight, for their length, for being much flattened at the sides, and for other strongly marked characteristics which indicate that they belong to an excessively low type."<sup>3</sup> They, in fact, belong to the Melanesian type which Mr. Keane refers to as that of the pure Papûans; while his full-blood Papûans of the north-west coast of New Guinea present a totally different type, that of the Mafors.<sup>4</sup> This shows how difficult it is to say what are the special features which characterise the Papûan race. The difficulty is almost as great when particular tribes are considered. We have a case in point in the Koiari, who are thought to be the original inhabitants of the south-eastern peninsula of New Guinea, where tribes with supposed Polynesian affinities have been met with. The Koiari are described as generally small in stature, with very small hands and feet, dark in colour, and much more hairy than their neighbours,

<sup>1</sup> "New Guinea," vol. ii, p. 377.

<sup>2</sup> *Ibid.*, vol. i, p. 86.

<sup>3</sup> *Ibid.*, vol. ii, p. 381.

<sup>4</sup> MM. Quatrefages and Hamy appear to regard the Arfak mountaineers near Dorey as presenting the pure Papûan type. Their heads are said to be longer, larger, and higher than those of the Mafors. See "*Revue d'Anthropologie*," 2nd Ser., tom. iii (1880), p. 123.

many of them having beards and whiskers. The Rev. Mr. Lawes states, however, that they present great differences of appearance. "Some seem to resemble some of the Australian tribes; a noticeable feature in others is the hooked nose spoken of by Mr. Wallace as characteristic of the true Papûan; others have quite a Chinese appearance, while others might lead one to fancy that New Guinea was the refuge of the lost ten tribes."<sup>1</sup>

After what has been said, we may be tempted to doubt whether the Papûans are entitled to be considered as constituting a distinct race. There is, however, the same difficulty in deciding on the characters which constitute the Polynesian peoples a distinct race. Mr. Keane divides his Caucasian type into two branches, the Continental, including the Khmêr or Cambodian group, and the Oceanic, embracing the Indonesian and the various Eastern Polynesian groups. The particular physical grounds on which he classes the latter with the Caucasian division of the human race it is rather difficult to determine. Mr. Keane gives the following description of the allied continental branch: "A fine, vigorous race, with symmetrical and well-set frames, stature rather above the middle size, straight profile, oval face, dolichocephalous head, high forehead retreating very slightly, black hair, often inclining to brown, straight or wavy and elliptical in section, beard and whiskers well furnished and always frizzled, or at least wavy, eyes perfectly straight and horizontal, nose not particularly prominent, but nearly always straight and never flattened at the root, cheek-bones scarcely, if at all, prominent, mouth of medium size and even small size, with moderate thick lips, but no trace of prognathism, complexion mainly of a bistre or brown colour, but varying from fair and even white to light brown and dark, though never so dark as that of the Aryans of India."<sup>2</sup> This description, as Mr. Keane justly observes, corresponds in all essentials to the ordinary Caucasian of Western Asia and Europe. But does it also apply to the islanders of the East Pacific? Mr. Keane remarks that they are "one of the finest races of mankind, Caucasian in all essentials, and without a trace of Mongolian blood." He says they are "distinguished by their fine, symmetrical proportions, tall stature, handsome and regular features," smooth but not lank hair, often curly and wavy. These particulars are intended to identify the Polynesians with the Cambodians, and they may be thought to do so. It must not be supposed, however, that all the Polynesian islanders answer to that description. In reality, great differences are observable among them. De Bougainville affirmed that there were two

<sup>1</sup> "Journ. Anthropol. Inst.," vol. viii (1879), p. 374.

<sup>2</sup> *Ibid.*, vol. ix, p. 262.



different races of men at Tahiti—one very tall, with features resembling Europeans, the other of middle size, and in colour and features differing little from mulattoes, and having hair quite frizzled.<sup>1</sup> Captain Cook also remarked the difference between the higher class and the common people,<sup>2</sup> although he did not ascribe it to mixture of race as the French navigator had done. Elsewhere, however, he observes that there is a striking difference between the women of Eimeo and those of the other islands, the former being of low stature, dark hair, and forbidding features.<sup>3</sup> Cook says of the natives of Hervey Island that they seem to differ in both person and disposition from those of Wateoo. Their colour was of a deeper cast, some of them being of fierce and rugged aspect, resembling the New Zealanders, although others were fairer.<sup>4</sup> The last-named people are described as being in colour from a pretty deep black to a yellowish or olive tinge; faces round, with full lips but not thick, noses full towards the point but not flat, eyes large with very free motion, and hair black, straight, and strong, sometimes of a curling disposition, and of a brown colour.<sup>5</sup> Of the Sandwich islanders themselves, Cook, who was struck by their resemblance in features and disposition to the New Zealanders,<sup>6</sup> observes that some are not unlike Europeans, but that they present considerable variety in features, some having the faces long, but others, especially the women, round.<sup>7</sup> Even of the natives of the Friendly Islands, Cook remarks that, owing to their features being so very various, it is difficult to fix on any general likeness, unless it be a fulness at the point of the nose. He states, however, that there were hundreds of truly European faces, and many genuine Roman noses.<sup>8</sup> This is different from what was observed by Anderson in relation to the New Zealanders, among whom no true aquiline nose was seen, although he describes them as having, like the Tongans, noses full towards the point.<sup>9</sup> Mr. Hale, of the United States exploring expedition says, the Polynesian nose "is eminently short and straight, but in certain tribes, and in some individuals of all tribes, it is long and aquiline, always appearing, however, to be slightly depressed and widened at the lower part." He adds that this depression of the nose is, with the complexion and

<sup>1</sup> "Voyage round the World," Eng. Trans., p. 249.

<sup>2</sup> "Hawthorne's Voyages," ii, p. 187.

<sup>3</sup> "Third Voyage," ii, p. 82.

<sup>4</sup> *Ibid.*, i, p. 209.

<sup>5</sup> *Ibid.*, i, 154.

<sup>6</sup> *Ibid.*, iii, 132.

<sup>7</sup> *Ibid.*, ii, 192, 228.

<sup>8</sup> *Ibid.*, i, 380.

<sup>9</sup> *Ibid.*, i, 154.

hair, the only general characteristic of the race.<sup>1</sup> This, however, is as much as to say that the only general characteristics of the race in which the Polynesians agree with the Cambodians are their complexion and hair. For the depression of the Polynesian nose, which appears to have struck voyagers in the Pacific so forcibly, can hardly be said to be noticeable among the Caucasians of Indo-China. Moreover, the form of the head among these peoples appears to be quite different. The Cambodian head is dolichocephalic, whereas that of the Polynesians is said by Mr. Keane to be brachycephalic, a peculiarity to which we shall have occasion again to refer.

It may be much doubted whether the Polynesians do not in reality possess as many features in common with the Papûans as with the Caucasian tribes of Indo-China. The fact that both of them belong to the bearded stock of mankind is of great significance. The long and aquiline nose observable among the Polynesians, although wanting the elongation of the tip often met with among the Papûans, undoubtedly resembles the large arched and high nose of the latter, which gives the face an European aspect.<sup>2</sup> Probably there would be a closer resemblance if it were not that the Papûan wears the nose-stick, and that the Polynesian nose, "which is naturally rather long and somewhat arched," is flattened in childhood by the mother.<sup>3</sup> Another feature in the Polynesian face which appears to have particularly struck the early voyagers is the expression of the eye, which, according to Dr. Topinard, is large, well formed, and more or less full.<sup>4</sup> Dr. Forster says of the natives of Tahiti that "their women have an open, cheerful countenance, a full, bright, and sparkling eye."<sup>5</sup> Again, as to the women of the Friendly Islands, he says, "their brown complexion becomes their regular features, their roundish faces, and fine, full, and lively eyes. Their countenance is overspread with an inexpressible smile."<sup>6</sup> That the Papûan eye has often the same character is evident from the portraits we possess, and is particularly observable in those given by Mr. Earl. Mr. Wallace does not refer expressly to this feature of the Papûan face in his work on the Malay Archipelago, but he does so indirectly in a comparison made between the Polynesians and the Papûans, both of whom he describes as "energetic, demonstrative, joyous,

<sup>1</sup> "Philology and Ethnology," p. 10.

<sup>2</sup> Wallace's "Malay Archipelago," vol. ii, p. 446.

<sup>3</sup> "Australasia," p. 493.

<sup>4</sup> "Anthropology," p. 479.

<sup>5</sup> "Observations," p. 230.

<sup>6</sup> *Ibid.*, p. 235. Dr. Forster says also of the Caroline Islanders that their eyes are large, lively, and piercing ("Observations," p. 600).

and laughter-loving," in all these particulars differing widely from the Malay.<sup>1</sup>

The existence of differences of no little importance between the Polynesians and Papûans is perfectly consistent with those races having been derived from a common stock. It must not be forgotten that the peoples referred to the so-called Caucasian type differ among themselves so much in language and features that they are often held to be radically distinct. The distinction between the Aryans and Semites is probably the same in character, if it has not had in fact the same origin, as that between the Papûans and the Polynesians, the former of whom have probably as great a resemblance to the Semitic branch of the Caucasian family as the latter have to its Aryan branch. The Papûans, indeed, exhibit certain features not uncommon among Europeans more strongly than the Polynesians themselves. Dr. Topinard expresses his opinion that the Ainos, or aborigines of Japan, belong to the European group,<sup>2</sup> and he makes a remark with reference to those aborigines which has indirectly an important bearing on the Caucasian character of the Papûans. He says: "Among the Todas of the Nilgherries, and, strangely enough, further on towards the north, among certain of the Ainos, two of the fundamental Australian traits are met with, namely, the very projecting superciliary arch, and the abundant hair on the whole body, characteristics the more remarkable from the fact that the reverse is the rule through the whole of Eastern and Southern Asia;"<sup>3</sup> and it might have been added among the Polynesians also. The abundant development of the pilous system, and the prominence of the superciliary arch, are by no means uncommon among Europeans, at all events in our western regions. Here the former, although not so pronounced, is a matter of common observation; and even in Eastern Europe it is so striking that Dr. Topinard supposes a race of the Aino type to have spread from Russia to the Pacific and the Indian Ocean.<sup>4</sup> As to the other feature, Dr. Topinard remarks, in relation to the dark European type, that the superciliary arches vary, "never exhibiting in the male sex the large size which we notice in the Melanesian races, nor the obliteration peculiar to the majority of Mongolian or negro skulls."<sup>5</sup> This is generally true, but Dr. J. Barnard Davis, when speaking of the Western Irish, who may probably be taken as representative of a very early European population, refers to

<sup>1</sup> Vol. ii, 454.

<sup>2</sup> "Anthropology," p. 476.

<sup>3</sup> *Ibid.*, p. 536.

<sup>4</sup> "Revue d'Anthropologie," 2nd Ser., tom. ii, p. 637.

<sup>5</sup> "Anthropology," 448.

the strongly marked superciliary ridges, "extending across the nose, making a horizontal line upon which the eye-brows are placed, and overhanging the eyes and face," as one of the distinct features in its physiognomy.<sup>1</sup> We may assume, therefore, that the two important features in question are European characteristics, in the sense that they are often met with among European peoples. The Papûans, the Melanesians, and Tasmanians, who also possess them, may therefore very properly claim to be fundamentally connected with the Caucasian family to which the Europeans belong, a claim which is supported by the fact that they also belong to the bearded division of mankind. The Polynesians also are a bearded race, and the conclusion that they likewise belong to the Caucasian stock is not invalidated by their wanting the prominent superciliary arch<sup>2</sup> and hairy frame of the Papûans, these characteristics being equally absent from many recognised Caucasian peoples.

The conclusion that the Papûans and the Polynesians belong fundamentally to the same race will appear the less strange if it can be really established that the Malayan Archipelago now contains peoples intermediate between those races. Mr. Wallace mentions the existence in the island of Ceram of an indigenous race very similar to that of the so-called Alfuros of the northern peninsula of Gilolo. The last-named people he describes as being "quite distinct from the Malays, and almost equally so from the Papûans. They are tall and well made, with Papûan features and curly hair; they are well bearded and hairy-limbed, but quite as light in colour as Malays."

The island of Bouru, which is between Ceram and New Guinea, is said by Mr. Wallace to be inhabited by two distinct races, "a shorter, round-faced people, with a Malay physiognomy, who may probably have come from Celebes by way of the Sula Islands; and a taller bearded race resembling that of Ceram."<sup>3</sup> This fact is important, as Bouru has been identified by some writers as the Sacred Island of the West from which, according to Samoan tradition, the Polynesian race started on its Eastern migrations.

The bearded peoples of Ceram and Bouru have been more recently described by Mr. Wallace as undoubtedly of Papûan race, and he distinguishes them from the light-coloured peoples of the northern peninsula of Gilolo, who resemble the Polynesians

<sup>1</sup> "Thesaurus Craniorum," p. 70. Spenser describes the native Irish as wearing *long glibbes*, i.e., "a thick curled bush of haire hanging down over the eyes, and monstrosly disguising them" ("View of the State of Ireland," in "Ancient Irish Histories," vol. i, p. 84).

<sup>2</sup> Dr. Topinard says as to the Polynesians, "the superciliary arches project but little" ("Anthropology," p. 479).

<sup>3</sup> "Malay Archipelago," vol. ii, p. 449.

in many respects, and whom he supposes to be a Polynesian colony intermixed with the Papûan aborigines, although speaking a highly peculiar language.<sup>1</sup> A migration westward from the Pacific is suggested by Mr. Wallace in connection with another people. He states that "the inhabitants of Timor appear to be wholly of Papûan race, but of a very distinct type from the natives of New Guinea. Their hair is less frizzled, their colour somewhat lighter, and their features less prominent." Their houses are not usually raised on posts, and they have the practice of "taboo" in full force. The islands east of Timor are inhabited by a similar race, whose head-stealing propensity, however, associates them not only with the wild tribes of Borneo, but also with the natives of New Guinea.

The presence, in the region from whence the Polynesian islanders are now generally believed to have migrated, of peoples who present points of contact with both the Papûans and the Polynesians strongly confirms the conclusion sought to be established by this paper, that these races have had a common origin. Nor is this view weakened by the discovery in New Guinea itself of tribes occupying much the same position. The Motu and allied tribes of the south-eastern peninsula of this island are said to differ in colour and also in features from the Papûans,<sup>2</sup> and they are supposed by the Rev. W. G. Lawes to be of Malayan origin,<sup>3</sup> an opinion which a more recent traveller, Mr. Octavius Stone, also formed.<sup>4</sup> Other writers, however, do not accept this view of the origin of the Motu.

Signor D'Albertis, indeed, has come to the conclusion that the light-coloured peoples, and not the dark tribes, represent the earliest inhabitants of New Guinea.<sup>5</sup> My theory, however, requires that they should belong to the same stock, an opinion which agrees with that of Dr. Comrie, who states that after "noticing in the same villages, and apparently in the same family, individuals exceptionally dark, the features and hair, even in the lighter individuals, remaining unaltered," he was "forced to the conclusion that the lighter-coloured people were the same race."<sup>6</sup> If this be so, there cannot be much difficulty in explaining

<sup>1</sup> "Australasia," p. 401.

<sup>2</sup> "Journ. Anthropol. Inst.," vol. vii (1878), p. 472.

<sup>3</sup> *Ibid.*, vol. viii, p. 371.

<sup>4</sup> "A Few Months in New Guinea" (1880), p. 75.

<sup>5</sup> D'Albertis' light-coloured race of the interior of New Guinea was referred to by Mr. Ranken in 1877 ("Journ. Anthropol. Inst.," vol. vi, p. 242), on the authority of a Polynesian missionary, who described them as a tall brown people, differing from the light tribes of the south-east peninsula; Mr. Ranken supposes them to be like the people of Ceram and North Gilolo described by Mr. Wallace.

<sup>6</sup> The hair of both the light and the dark Papûan is equally flattened and tape-like ("Journ. Anthropol. Inst.," 1877, vol. vi, p. 106).

the differences which now exist between the Polynesians and the Papûans.<sup>1</sup> The lighter-coloured Papûan tribes of New Guinea, and the Malayan Archipelago approach the Polynesians nearer than the darker tribes, but their frizzly hair shows that they do not represent perfectly the primitive Caucasian stock of that region.

We have now to consider the causes of the physical differences which exist between the Papûans and the Polynesians, assuming that they have sprung from a common stock.

As to the colour of the skin, we have had occasion to point out that both the Papûans and the Polynesians present various shades of colour, from yellow to black in the one case, and from yellow to dark brown in the other. The lighter colour of some of the Papûan tribes is generally explained as being due to crossing with the Polynesian race. Among the Sandwich Islanders, however, according to Choris,<sup>2</sup> the curious phenomenon is presented of the children when first born being black, the people of distinction dark brown, and the labouring people of a lighter tint, or orange colour. This Dr. Topinard explains by supposing the two classes to belong to distinct races, which means that it is due to the crossing of two races, one of which shows its greater influence in the dark colour of the children. An analogous explanation must be given of the difference in colour of the Papûans and Polynesians, granting, as we may, that the former are as a rule of a much darker hue than the latter, and that while black predominates in the one, yellow is the prevailing tint in the other. These extremes of colour may no doubt be referred to distinct races, both of which would seem to have been represented in the Tasmanians, whose colour was said to be as black as soot, with a slightly yellowish tinge in it.<sup>3</sup>

Dr. Topinard says that "colour is an excellent character of race, but it should not be taken as a basis of classification." He adds, "Taken in connection with others, this character becomes very valuable. The Bosjesman is distinctly separated from all the other negroes by a peculiar yellow tint, and the Australians from all the other straight-haired races by the black."<sup>4</sup> It would seem that not only may the colour of the skin be changed through the influence of climate, but the change may be transmitted in an intensified form from one generation to another. Thus, fair Europeans, when exposed to a tropical sun,

<sup>1</sup> Mr. Ranken refers to a Rarotongan legend which speaks of Papûa land as at one time the home of the Polynesian race, Papûa being another name for the Land of Red Feathers, *op. cit.*, p. 240.

<sup>2</sup> Cited by Dr. Topinard ("Anthropology," p. 389).

<sup>3</sup> *Ibid.*, p. 386.

<sup>4</sup> "Anthropology," p. 350.



"become sunburnt, and of a brick-red hue, or assume a yellowish tint, which," says Dr. Topinard, "Mourad considers as the first evidence on the coast of Guinea of having become acclimatized. This yellow colour passes into that of copper, and becomes darker in each succeeding generation."<sup>1</sup> The French anthropologist remarks, as to the hair, that there is no authentic instance of the transmission of change in the character of the hair, when this has taken place in an individual, through the influence of external conditions, and the French anthropologist affirms, indeed, that no explanation can be given as to the origin of the varieties of the hair in its fundamental types.<sup>2</sup> Hair form is, therefore, a more important anthropological character than colour, a change which can be transmitted, if we are to believe Mourad, and on this ground the Australians should, in a classification of the Oceanic races, be placed with the Polynesians rather than with the Papûans. Of course it may be objected that if the Polynesians and Australians are associated on the ground of similarity of hair form, the Papûans by their frizzly hair should be placed apart from both. The reply to this objection is that all these races agree in other characters equally important. For instance, the abundant growth of hair on the face, which is a characteristic of both the Indo-European and the Semitic branches of the straight-haired Caucasian family, is possessed also in common by the Oceanic races. If this be a mark of original community of race, we must conclude that the frizzly hair of the Papûan is the result, like the dark colour of the Australian, of a cross between peoples of different types.

The position of the Australians in relation to the other Oceanic races, connected as they are by hair form with the Polynesians, notwithstanding their more intimate alliance with the Papûans by other characters, is one of great importance. Nor is this lessened by a consideration of the cranial conformation of those races. Dr. Topinard remarks that the vault of the Polynesian skull, where it is not affected by the Melanesian element, is generally occupied by a crest, the two sides of which incline like the roof of a house, or are hollowed out in wide channels, after which come the parietal protuberances.<sup>3</sup> Elsewhere he states that the Polynesians, those of the east more especially, exhibit a form of skull similar to that of the Tasmanians, which is of the keel-shaped type, "while it never exists either in Australians or New Caledonians, who are the most Melanesian."<sup>4</sup> Nevertheless, the Tasmanian skull agrees closely in other important features with the skulls of both the Australians and the Melanesians. Professor Flower, when comparing the crania

<sup>1</sup> "Anthropology," p. 389.

<sup>2</sup> *Ibid.*, p. 391.

<sup>3</sup> "Anthropology," p. 478

<sup>4</sup> *Ibid.*, p. 500.

of the Andamanese and the Tasmanians, states that the latter make an approach to brachycephaly, but that the "superciliary ridges, the low orbits, the wide nasal aperture, the prognathism common to all Melanesians, and distinguishing them from Negritos, are all exaggerated in the Tasmanians."<sup>1</sup> In some of these characters, moreover, and in others referred to by Dr. Davis,—who, nevertheless, strongly insisted on the essential difference between the Tasmanians and their neighbours, especially their long, thick, and heavy skulls, and their enormous mouths and large and massive teeth,—the Tasmanians agreed with the natives of Australia, whom they resembled also, as we have seen, in being well furnished with hair on the face. The characters in which these races differ show in the former a cross with the Polynesians, as Dr. Topinard supposes, or perhaps rather with the short-headed Negrito race.

Among the Australians a crested and rafter-like form of the vault of the cranium is frequently met with, and with them also is found, more commonly than among any other race which has a tendency to the early closing of sutures, the peculiar form of skull known as *scaphocephalism*.<sup>2</sup> This is defined by Dr. Topinard as being a deformity peculiar to the cranium "characterised by its contraction transversely, its antero-position elongation, and its increase in height. The skull turned upside down has the form of a boat, from which its name is derived; the forehead is straight, bulging, and narrow; the occiput is globular and conical, and projects backwards from the lambdoidal suture. A horizontal crest reaches from one to the other on the anterior half, the sides shelving like the roof of a house, which the obliteration of the parietal protuberances renders still more prominent."<sup>3</sup> This deformity is due among the Australians to the premature closing of the anterior sutures, but Professor Van der Hoeven found that the skulls of the Caroline Islanders present the same peculiarities without reference to the closure of any sutures, and he regarded them accordingly as natural scaphocephali. The same form of cranium has since been identified as possessed by many of the islanders of the West Pacific, most of the Melanesians probably belonging to the curious type of skull termed *stenocephalic*. Dr. Barnard Davis, who was the first to make this important observation, mentions that Dr. Welcker had already claimed as a natural peculiarity the approximation to scaphocephalism in the Esquimaux skull.<sup>4</sup> This is described by Dr. Topinard as forming a long parallelogram, the sides of

<sup>1</sup> "Journ. Anthropol. Inst.," vol. ix (1880), p. 130.

<sup>2</sup> Dr. Davis "On Synostotic Crania," p. 39.

<sup>3</sup> "Anthropology," p. 175.

<sup>4</sup> "On Synostotic Crania," p. 31, note.

which fall down vertically, and in some skulls the sagittal crest is so marked that they seem, physiologically, scaphocephalic.<sup>1</sup>

Signor D'Albertis states that the remarkably high, long, and flattened skulls obtained by him from the interior of New Guinea resemble crania in his possession from the New Hebrides, and others he had seen from the interior of the Fiji Islands.<sup>2</sup> This is important, as Professor Flower affirms that, if we may judge from the series of crania examined by him, the mountaineers of Viti Levu are the most dolichocephalic, or more properly *stenocephalic*, people in the world. He says, moreover, that they "present in their cranial conformation a remarkable purity of type, and that this type conforms in the main with that of the Melanesian Islands generally."<sup>3</sup> The existence of this type in New Guinea, as mentioned by Signor D'Albertis, confirms the view that the Papûans are by no means a pure race. At the same time, the evident connection which exists between the Papûan type and the Melanesian type found among the Fijian mountaineers would seem to prove that the latter are themselves not a pure race, but are the result of a cross between different races. The Papûans can hardly have been indebted for their frizzly hair and dark skin to the Melanesians, and probably both have derived those peculiarities from a third source. Dr. Davis remarked "that the high narrow skull is not essentially associated with the mop-headed races, and that it is equally independent of the fact of the hair growing in tufts or otherwise."<sup>4</sup> The Australians and the Esquimaux, who show a tendency to that form of skull, are straight-haired. Moreover, the hair of the Caroline Islanders, who are scaphocephalic like the Melanesians, is straight.<sup>5</sup> The probability is, therefore, that natural scaphocephali first appeared among a straight-haired race. Moreover, as that deformity depends on the premature obliteration of the sagittal suture, it most probably showed itself originally with one of the inferior races. Professor Gratiolet, as quoted by Dr. Davis, has said not only that the growth of the brain ceases sooner in those races in which the sutures close early, but also that there is a difference between the higher and the lower races as to the order in which the sutures are closed normally. In the latter the anterior sutures close before the posterior, and in the higher races it is the reverse, the posterior sutures close earlier than the anterior. On this Dr. Davis remarks: "Certain races possess a super-

<sup>1</sup> "Anthropology," p. 474.

<sup>2</sup> *Op. cit.*, ii, 381.

<sup>3</sup> "Journ. Anthropol. Inst.," vol. x (1880), p. 153, *et seq.*

<sup>4</sup> "Anthropological Review," vol. iv (1866), p. 60.

<sup>5</sup> *Ibid.*, p. 52. Dr. Forster says "their hair is black, long, and falling in curls" ("Observations," p. 600).

activity in the process of ossification of the bones of the head. Many of the negro and Australian races are remarkable for the great thickness and weight of the skull. And, in the same way, these races are distinguished for a proneness to closure of the sutures which takes place at an earlier period of life than any European races." Notwithstanding this common tendency, true scaphocephalism appears, according to Dr. Davis, to be rare among negro skulls, and more frequent among the Australians.<sup>1</sup> It is to the latter race, therefore, I would assign the position of representatives of the primitive stock among whom that peculiar deformation of the skull first established itself, to give rise, under varying conditions of crossing with other races and under other influences, to the pyramidical skull of the Esquimaux, and the hypsi-stenocephalic skull of the islanders of the West Pacific. This would require a much wider spread than at present of the primitive race now represented by the Australians, and there are facts which show that such an extension at one time took place.

It has already been mentioned that two of the fundamental Australian traits are the projecting superciliary arch and the abundant hair on the body. The possession of these two traits may be regarded, therefore, as signs of relationship, however distant, and, as they are met with among the Tasmanians and the New Caledonians, we must consider these peoples and the Australians to be fundamentally allied. Dr. Topinard, who supposes the Tasmanians to possess a Polynesian element, nevertheless states that the former possessed very projecting superciliary arches and a very abundant growth of hair on the face and the rest of the body, as in Australians.<sup>2</sup> The New Caledonians are also distinguished by prominent eyebrows, and, among the dark type at least, the body is said by M. Bourgarel to be often covered with short hair.<sup>3</sup> This is no less true of the Melanesians. The prominent brow of the Melanesians has already been referred to,<sup>4</sup> and Dr. Forster long since noted that some of the natives of Mallicolo and also of Tanna were very hairy.<sup>5</sup> According to Dr. Meyer, the Papûan has very prominent brows, and the same kind of hair that adorns his head and face grows more or less densely on his arms, legs, and breast,<sup>6</sup> in which he agrees with the Aïnos and the Todas, whose possession

<sup>1</sup> "On Synostotic Crania," p. 39.

<sup>2</sup> "Anthropology," p. 501.

<sup>3</sup> Mem. "Soc. d'Anth.," tom. ii (1865), pp. 375, 382.

<sup>4</sup> See also "Journ. Anthropol. Inst.," vol. vi, p. 336, as to the Admiralty Islanders, and vol. x, p. 159, as to the Fijians.

<sup>5</sup> "Observations, &c.," p. 243.

<sup>6</sup> Wallace's "Australasia," p. 447. As to the Humboldt Bay natives and the Admiralty islanders, see the "Journ. Anthropol. Inst.," vol. vi, p. 385.

of those Australian traits we have already had occasion to notice.

If, however, we take the Australians as the representatives of the primitive stock from which all the present races of the Oceanic area have sprung, we shall have to show how these races can have acquired the peculiarities which now distinguish them. As to the Australians themselves, we can hardly doubt that they are not an absolutely pure race. The existence of two types among them has been ably maintained by Dr. Topinard,<sup>1</sup> and he says "it is clear that the Australians might very well be the result of the cross between one race with smooth hair from some other place and a really negro and autochthonous race." The French anthropologist appears to think that the Australians possess an Indian element, as he says that "if the Australians are Hindoos as regards their hair, they are Melanesians, or, if you will, New Hebrideans, New Caledonian negroes in every other respect."<sup>2</sup> This confirms what has already been said as to the relationship between these various peoples, although I would reverse the description, and say that the Melanesians are Australians with a Negrito intermixture. The frizzly hair sometimes met with among the Australians is to be explained by assuming that the same race to whom both the Tasmanians and Papuans are indebted for their peculiar hair form at one time occupied the Australian continent,<sup>3</sup> or have been in contact with the Australian race. The existence in Southern India, as mentioned by Dr. Topinard,<sup>4</sup> of tribes presenting marked Australian features is not inconsistent with this opinion, as none of them have frizzly hair, which appears, however, among Indian tribes further north, where a Negrito element is perhaps more likely to be met with.

To a very ancient cross with this element the present Australian aborigines are, I believe, indebted for their dark colour, if not for their flat nose and their large full eye, which is remarkable for its fine expression.<sup>5</sup> M. de Quatrefages supposes the Negrito race to have at one time spread throughout the whole of the Asiatic Archipelago to New Guinea, where it has

<sup>1</sup> "Revue d'Anthropologie" (1880), p. 123.

<sup>2</sup> "Anthropology," p. 502.

<sup>3</sup> This conclusion differs somewhat from the view expressed by me in the "Revue d'Anthropologie" of 1873, and approaches very nearly that of Dr. Topinard as to the duality of races on the Australian continent, although I still think that the Australian race shows comparatively little trace of Negrito influence.

<sup>4</sup> "Anthropology," p. 504.

<sup>5</sup> This observation is fully borne out by the portraits given in Dammann's "Anthropologisch-Ethnologisches Album."

mixed with the Papûans, and as far north as the Marianne Islands and Japan.<sup>1</sup>

He seems to think, moreover, that the Negritos have contributed to the peopling of Australia, and he remarks that numerous stone instruments found in Java, and which are attributed to the first inhabitants of this island, resemble those fabricated by the natives of Northern Australia.<sup>2</sup> He further cites, with approval, the opinion expressed by the American traveller Pickering, that the inhabitants of the New Hebrides and of the Solomon Islands belong to the Negrito race.<sup>3</sup> The Melanesians are not Negritos, but they exhibit at least the effect of a cross with this race of a much more marked character than that which the Australians present, as not only has it changed the character of the hair, but it may possibly have contributed to the height of the vertical index exhibited by the Melanesians.<sup>4</sup> We see the influence of the Negrito element amongst the Tasmanians in their dark colour and in the nature of their hair, which, as pointed out by Dr. Davis, grew like that of the Andamanese, in small corkscrew ringlets.<sup>5</sup> The approach made by the Tasmanians to brachycephalism, and the "particular roundness, or spheroidal form," which manifests itself, says Dr. Davis, in all their features,<sup>6</sup> may probably be explained in the same way. The natives of New Caledonia present an analogous although not quite similar condition of intermixture. Dr. Davis has shown that the Melanesian type predominates,<sup>7</sup> but according to Dr. Topinard, Polynesian influence exhibits itself in the stature and the nasal index. Both of these characters, however, may be due to the presence of an Australian or Melanesian element. There is reason, moreover, to believe that the Malays and the Negritos of the Andaman Islands have influenced each other, if, indeed, they are not nearly related.<sup>8</sup> Professor Flower, who regards the Negritos as representing "an infantile, undeveloped, or primitive form of the type from which the African negroes on the one hand, and the Melanesians on the other, with all their various modifications, may have sprung,"<sup>9</sup> remarks that one difficulty

<sup>1</sup> "Revue d'Anthropologie," vol. i, p. 244.

<sup>2</sup> *Ibid.*, pp. 233-238.

<sup>3</sup> *Ibid.*, p. 237.

<sup>4</sup> I am aware Professor Flower states that in only one out of twenty-four Andamanese skulls "does the height exceed the breadth, and this only 2 millimetres, whereas in the frizzly-haired Papûans and Melanesians, with whom the Andamanese have often been associated, the height almost invariably exceeds the breadth." (See the "Journ. Anthropol. Inst.," vol. ix, p. 114.)

<sup>5</sup> "On the Osteology and Peculiarities of the Tasmanians" (1874), p. 9.

<sup>6</sup> *Ibid.*, p. 10.

<sup>7</sup> "Thes. Cran.," p. 309.

<sup>8</sup> "Anthropology," p. 496.

<sup>9</sup> "Journ. Anthropol. Inst.," vol. ix, p. 129, *et seq.*



in investigating the evidence of the original geographical distribution of the Negritos "is the resemblance which the skulls of another race, inhabiting nearly the same area, the Malays, bears in many points to those of the Negritos, so that a combination of the frizzly hair of the Papûan with the round skull of the Malay in a mixed race might easily, though perhaps erroneously, be attributed to Negrito influence."<sup>1</sup> From this we might almost infer that the Andamanese themselves may not be a pure race. If this should prove to be the case, it would be an extraordinary fact, after all that has been written about them as typical Negritos. Not much is known as to the affinities of the Andamanese language, but I shall be surprised if it is not found to be more nearly related to some of the languages of the Archipelago than to the Burmese, as suggested by Dr. Latham. If that be so, it may perhaps hereafter appear that the Andamanese belong fundamentally to the same stock as the various races of the Oceanic area, although more profoundly modified than the latter by crossing with the Negrito race and the short-headed Asiatic race of which the Malays are the modern representatives.<sup>2</sup> The origin of the Malays has yet to be determined, but that Asia was the original home of their ancestors, paternal or maternal, is evident from Dr. Topinard's statement that the Tibetan type, to which the Chinese, the Burmese, and the Annamites are allied, establishes the transition between the Mongol and the Malay.<sup>3</sup> It has been customary to speak of the Dyaks of Borneo, the Battaks of Sumatra, and the wild tribes of the Malay Archipelago as Malays. This has been shown, however, by Dr. Davis and others to be a mistake; and as those peoples adjoin other tribes who are allied to the brown type of Papûans or Polynesians, we can hardly doubt that the so-called savage Malays in reality belong to the latter class,<sup>4</sup> although they have become modified by crossing with intruders of the true Malay stock.

We have seen that the light-coloured Papûan tribes of the Eastern Archipelago have been modified by intermixture with the Negrito race, although not to the same extent as the other

<sup>1</sup> *Loc cit.*, p. 129. The moderately dolichocephalic skull of a New Guinea Bushwoman referred to by D'Albertis (*op. cit.*, vol. ii, p. 179) would seem to have much in common with the Andamanese crania figured by Professor Flower. M. Raffray declares the Karons of north-west New Guinea to be Negritos ("Le Tour du Monde," 1879, "Prem. Sem.," p. 270). Reference may be made to an article on the Negritos of the Philippines, by the late Dr. J. Barnard Davis, in the "Journal of Anthropology" (1870).

<sup>2</sup> "Elements of Comparative Philology," p. 59.

<sup>3</sup> "Anthropology," p. 476.

<sup>4</sup> M. Vivien de Saint-Martin says that they have straight hair, a strong beard, an abundant pilous system, a straight or slightly aquiline nose, and eyes of the European type ("Nouv. Dict. Geog. Univl.," art. 'Archipel Asiatique').

Papûan tribes. It is not improbable, however, that the latter may have been further modified by contact with a race other than the Negritos. The occurrence among the dark Papûans of South-eastern New Guinea of individuals whose features, says Mr. Lawes, "might lead one to fancy that New Guinea was the refuge of the lost ten tribes" has already been noted.<sup>1</sup> Mr. Jukes was struck by the Jewish features of some of the southern Papûans.<sup>2</sup> Mr. Wallace refers to the Jewish and elongated nose of the Papûans, which he thinks has had the same origin as their frizzly hair,<sup>3</sup> and Dr. Beccari ascribes the high type of the Mafu Papûans to an infusion of Caucasian or Hindoo blood.<sup>4</sup> A more recent observer, Signor D'Albertis, states that he saw the same type of people at Aden as at Yule Island in New Guinea. He says, indeed, that if Michlukko Maclay, who believed he had discovered traces of the Papûans at Borneo and Malacca, had seen the natives of Yule Island, he "would have gone much further to the west to trace the origin of the greater part of the Papûan tribes." D'Albertis here refers to Arabs whom he saw at Aden.<sup>5</sup> Elsewhere he remarks that the Somaui, who had a receding forehead, aquiline nose, moderately thick lips, and curly but not woolly hair, might be mistaken for natives of New Guinea belonging to what he calls the Arab type of Papûan.<sup>6</sup>

The Arab Papûan type has been noticed beyond New Guinea. Mr. Moseley says that about 1 in 15 or 20 of the natives of the Admiralty Islands have most remarkably long Jewish noses. At first he thought this peculiarity was caused to some extent by "long action of excessively heavy nose ornaments," but his opinion changed when he saw women without such ornaments and having well-marked arched noses with dependent tip.<sup>7</sup> The same feature is observable among the Fijians and New Caledonians, and in the New Hebrides.<sup>8</sup> Most probably it is due to the existence of a Semitic element among those peoples, and such an origin must, I think, also be ascribed

<sup>1</sup> Curiously enough, a similar remark has been made as to the Polynesian islanders. Dr. J. Barnard Davis mentions that Mr. Thomas P. Lawson, of Uahuga, ardently maintains that the Marquesan Islanders are the lost ten tribes, and that he was informed by the Rev. W. Wyatt Gill that, "all the elder missionaries who went out in the 'Duff' thought the Polynesians were the lost ten tribes" ("Thes. Cran.," Supplement, p. 80).

<sup>2</sup> "Voyage of H.M.S. 'Fly'" (1847), vol. ii, p. 236.

<sup>3</sup> "Contemporary Review" (1879).

<sup>4</sup> See Wallace's "Australasia," p. 453.

<sup>5</sup> *Op. cit.*, i, p. 259.

<sup>6</sup> *Ibid.*, ii, 368. Some of the Arab tribes are said, however, to have fine hair, somewhat crisped "and approaching the woolly hair of the Negro" (Prichard: "Phys. Res.," vol. iv, p. 593).

<sup>7</sup> Journ. Anthropol. Inst., vol. vi (1877), p. 386.

<sup>8</sup> Peschel: "The Races of Man," p. 339.

to the aquiline nose often seen among the Polynesians. Dr. Topinard remarks that the nose of the Polynesians more nearly approaches the American than the Mongolian type, by which he means, no doubt, the large prominent bridged or, according to Catlin, aquiline nose which is more frequent among the Americans than the small nose of the Mongol. The French anthropologist affirms that the characters presented by the North Americans are those of races which have crossed, one of the elements being clearly Asiatic, and the other altogether special—dolichocephaly, the European nose, &c.<sup>1</sup> We have here much the same phenomena as are presented by the Polynesians, whose peculiarities, as distinguished from the lighter-coloured Papûans, must be explained, apart from the Negrito element observable in the latter, by the presence of an Asiatic element, which has also influenced the Papûans to some extent, but not so profoundly.

The Asiatic race to which the physical peculiarities exhibited by the Polynesians are due can only be the Malayan, or at least the Mongoloid race whom the Malay represents in the Asiatic Archipelago. It is true that Mr. Keane speaks of the Polynesians and Malays as having in common only "one or two cranial features of no particular value as racial tests, at least when taken apart." As against this opinion we have, however, the authority of the Rev. Mr. Whitmee as to the close agreement of those races in many particulars;<sup>2</sup> we have, moreover, the facts, stated by Dr. Topinard, that the Polynesian type approaches the Malay, and that by its orbital index, as well as by its nasal index, it belongs to the same group as that of the Chinese, the Malay, and the Americans. Moreover, the sub-nasal prognathism of the Polynesian shows "the influence of the yellow and black populations with which he has been mingled."<sup>3</sup> We may see in the remarks of the French anthropologist a justification of the opinion that the Polynesians are not a pure race, and that if we were to subtract, on the one hand, the peculiarities to which they are indebted to the Malayan and Melanesian elements, and on the other the special features which the Papûans have obtained from the Negritos, and perhaps also from the Arabs, we should find the dark and the light peoples of the Pacific area to present much the same straight-haired, dolichocephalic type which, for want of a better term, we might call Austral-Caucasian.

<sup>1</sup> "Anthropology," pp. 470-481.

<sup>2</sup> See the "Contemporary Review" for February, 1873, p. 406. Mr. Ranken is of the same opinion, although he thinks the Polynesians are not really Malays, but allied to them as belonging to the Mongolian stock ("Journ. Anthropol. Inst.," vol. vi, p. 244).

<sup>3</sup> "Anthropology," p. 478.

Mr. McFarlane, after a five years' residence in South-eastern New Guinea, came to the conclusion that the coast tribes were a mixed race, consisting of Malays, Polynesians, Arabs, Chinese, and Papûans.<sup>1</sup> Possibly another people, who appear at one time to have exercised great influence in the Malayan Archipelago, may have affected both the dark and the light tribes of this area. Dr. Beccari believes that the Mafu Papûans are the result of an intermixture of Caucasian or Hindoo blood, which he supposes to exist also in the Galelo men of Gilolo. This island is very far from Bali, one of the Sunda Islands, where the people are divided into the four castes of ancient India, and the Hindoo religion still prevails.<sup>2</sup> But the Malays have reached much higher north than the Moluccas, and there is no reason why the Hindoos should not also have done so. It is possible that the Hindoos have contributed a much more important element than is generally supposed to the Caucasian population of the Eastern Islands.<sup>3</sup> Perhaps, however, we must look to the countries beyond the Ganges as the real source of the later Caucasian element, which appears to have spread from the continent over the Asiatic Archipelago. We are reminded of the Naga worship of those countries by the serpents and crocodiles sculptured on the temple at Dorey, which are supposed to represent such of the ancestors of the people as were descended from those animals.<sup>4</sup>

Nor does the fact of the average stature of the Polynesians being very high<sup>5</sup> and that of the Papûans, as given by Meyer, very low, affect the conclusion that those races belong to the same stock. The New Caledonians and the Fijians are above the middle height, and that they need not be indebted for their high stature to the Polynesians is evident from the fact that the average stature of the Australians given by Dr. Topinard is very high. As stated by the French anthropologist, the Australians are divided into two races, the one short and the other tall.<sup>6</sup> The former is that which would be identified with the Negrito race, and it is to this race the small stature of some of the tribes of New Guinea must be ascribed. Mr. Earl affirmed that "on the south-west coast of New Guinea, within the space of a hundred miles, are to be found tribes whose general stature is at least equal to that of the finer races of

<sup>1</sup> "Australasia," p. 454.

<sup>2</sup> *Ibid.*, pp. 453, 421.

<sup>3</sup> Traces of Hindoo influence have been met with in South-east Borneo, including inscribed tombstones ("The Head Hunters of Borneo," by Carl Bock, p. 47).

<sup>4</sup> D'Estrey: "La Papouasie," p. 132.

<sup>5</sup> Dr. Topinard gives it as 1.762 mètre, equal to about 5 ft. 9 in. English.

<sup>6</sup> "Anthropology," p. 322.

Europeans, and others whose proportions are so small as almost to entitle them to the appellation of pigmies."<sup>1</sup> The latter are found only among the mountain tribes, and we may expect the Negrito element to be more influential with them than with the taller Papuans of the coast. Signor D'Albertis' observations would seem to agree with those of Mr. Earl. He describes the natives of Moatta, near the Fly River, as being of lofty stature, the women especially being tall and robust,<sup>2</sup> and even the Arfaks, or mountaineers near Port Dorey in the north-west, are said to be of tall stature.<sup>3</sup> The Italian traveller states, moreover, that the light-coloured Papuans are not generally inferior in stature to the black race,<sup>4</sup> which would seem to imply that the former are not always so tall as the latter.<sup>5</sup> That the Caucasian race of the Malay Archipelago is not always of high stature is shown by reference to the Mentawey Islanders. These people are described by Mr. Crisp in the "*Asiatic Researches*" as seldom exceeding 5½ feet, and many of them as falling short of this height.<sup>6</sup> The light-coloured natives of Northern Celebes, who are said to resemble the Polynesians in feature, differ from them nevertheless in being of only moderate stature.<sup>7</sup>

The conclusions to which I have been led by a consideration of the preceding facts are as follows:—

1. The Eastern Archipelago was at a very early period inhabited by a straight-haired race belonging to the so-called Caucasian stock, the purest modern representatives of which are the Australians.
2. To this race belonged also ancestors of all the Oceanic races—including the Papuans, the Micronesians, the Tasmanians, and the Polynesians—as shown by their common possession of certain physical characters.
3. The special peculiarities of the several dark races are due to the introduction of various foreign elements, the Negritos having influenced all of them in varying degrees.
4. The lighter Oceanic races show traces of the Negrito influence, but they have been affected at various periods by intermixture with peoples from the Asiatic area, giving rise on the one hand to the so-called

<sup>1</sup> "Papuans," p. 4.

<sup>2</sup> "New Guinea," vol. ii, p. 11.

<sup>3</sup> *Ibid.*, vol. i, p. 317.

<sup>4</sup> *Ibid.*, p. 411.

<sup>5</sup> Mr. Stone states that the Motu are an inch taller than the Papuan Koiari, whose average height (men) was 5 ft. 3 in., but the Ilema, who appear to combine several characteristics of both the light and the dark tribes (p. 205), were 2½ inches taller. ("A few Months in New Guinea," p. 165.)

<sup>6</sup> Vol. vi (1801), p. 83.

<sup>7</sup> See "Australasia," p. 387.

"savage Malay," and on the other to the Polynesians, who have been specially affected by the Malays.

5. Traces of an Arab or Semitic element are apparent among both the dark and the light Oceanic races, but chiefly among the Papûans and the Melanesians, the former of whom may also possibly possess a Hindoo admixture.

These conclusions probably require, as Mr. Keane supposes, the Negrito to have been the earliest inhabitant of the Eastern Archipelago, but there is less truth in Mr. Keane's further supposition that this primitive race, spreading north over the Asiatic continent, "became under more temperate climes differentiated first, probably, into the yellow Mongol and then through it into the fair Caucasian type," returning in subsequent ages to its original home as Malays and Polynesians. According to my view, the Austral-Caucasian stock occupied the Eastern Archipelago at a much more remote period than Mr. Keane's theory would allow, at an early date, however, to be modified by intermixture with the Negritos, and at a comparatively recent period to be still further modified by the introduction of the Malay element so as to produce the light races of that area.

I have purposely abstained from criticising Mr. Keane's views as to the absence of relationship between the Papûan and the Polynesian languages. In conclusion, however, I would refer to the opinion expressed by the Rev. S. J. Whitmee that not only are the whole of the Malayo-Polynesian languages, together with those of the Indian Archipelago and the Malagasy, more or less changed branches from an original root-stock, of which the Malay is more changed than any of the others, but that first the Papûan languages, and then the Australian, must be affiliated to the same stock, the original form of which they approach still nearer to than either the Malay or the Polynesian branches. This opinion, which agrees with that of other competent authorities, coincides with my theory, and it would be no less strongly supported by a consideration of the manners and culture of the Oceanic races.

#### DISCUSSION.

MR. KEANE remarked that although the relations of the Oceanic races had been constantly before the Institute for several years past, it was to be feared that little progress had been made towards a settlement of the various points at issue. Nor did the question seem to be much furthered by the paper just read, which might be



regarded as an attempt to revise the paradoxical views first advanced some years ago by Mr. A. R. Wallace, but subsequently abandoned, or at least greatly modified, by that distinguished naturalist. This attempted revival of theories almost unanimously rejected by sound anthropologists was much to be regretted in the true interest of science, but could not perhaps excite surprise when taken in connection with previous essays by the author in the same field of inquiry. His views regarding the affinities of the Papuan and brown Polynesian races must, however, be regarded as even more unhappy than his extravagant notions touching the affinities of the Malagasy people, first with the African negroes, and then with the Siamese of Further India. Mr. Keane could not, of course, expect his own views to receive much consideration at the hands of such a writer. But he did expect that they would at least be fairly stated. Unfortunately, in the paper just read they had been mostly misunderstood, while the facts and arguments advanced in their support had been rather slurred over than seriously dealt with. There was, however, no need to waste the time of the Institute with a re-statement of the case from his point of view, as it had already been fully placed before the public in an accessible form. A reference to his "Monograph on the Indo-Chinese and Oceanic races" would show that, whatever value might be attached to his conclusions, they were not based, as asserted by Mr. Wake, merely on one or two secondary features, such as colour, or even language alone. Full consideration had, on the contrary, been given to the anatomical structure, and to all the outward physical features, as well as to the linguistic element, in the various races, whose affinities he had attempted to establish. His scheme might, of course, be rejected, and could, in the present state of these studies, make no claim to finality. The apparent dogmatism with which it was put forward was due rather to the necessity of formulating his views in precise language, than to any obstinate belief in their infallibility. But although all such essays must for a long time continue to partake more or less of a tentative character, one negative conclusion he did consider as settled and tacitly accepted by science. That conclusion met the title of Mr. Wake's paper by a direct negative, holding that, whatever might be their relationship to other stocks, the dark, frizzly-haired, hook-nosed, hypsistenocephalic Papuans of fully developed agglutinating speech had no perceptible affinity, beyond their common manhood, to the tall, brown, somewhat lank-haired, straight-nosed, brachycephalic Eastern Polynesians of almost isolating, or very faintly developed agglutinating speech. The linguistic element, treated vicariously and not altogether ignored by Mr. Wake, possessed in this area quite an exceptional importance. Hence it could not be too widely known that, after further research, Von der Gabelentz had abandoned his former views, and now held that the Papuan and Polynesian languages, like the races, were fundamentally distinct. In this conclusion Dr. A. B. Meyer acquiesced, and there could be little doubt that on re-consideration, Mr. Codrington would agree with

Mr. Whitmee that the two forms of speech had nothing in common beyond superficial resemblances, or what might be due to mutual borrowings. This factor must therefore be taken into account and seriously dealt with by those ethnographers who may still be disposed to group the Papûans and Polynesians in the same division of the human family.

Mr. WAKE stated, in reply, that he had limited himself to a consideration of physical characters, as the time at his disposal would not allow the question of language to be then properly treated. He did not think his arguments were affected by what Mr. Keane had said; and he suggested that if the Melanesians had, as Mr. Keane seemed to suppose, taken their language from the Polynesians, the latter may have been indebted to another race for their language. He referred to a paper recently read before the Académie des Inscriptions, by M. Aymonier (see the "Academy," January 7, 1882, p. 14), who stated that the people known as Ciam were the dominant race throughout the peninsula of Further India before the invasion of the Khmers of Cambodia, and of the present inhabitants of Annam, and that they received their culture from India in the first century A.D. The Ciam, who are still found everywhere in scattered communities, have three dialects or languages: (1) the *dalil*, or sacred language; (2) the *ciâm*, or the vernacular proper; (3) the *bani*, a Muhammadan dialect, which has now superseded the other two.

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The following paper was read by the author, and illustrated by a large series of photographs, &c. :—

*ON SOME RITES and CUSTOMS of OLD JAPAN.*

By C. PFOUNDÉS, Esq.  
F.R.G.S., M.A.I., M.R. Asiatic Society.

[*Abstract.*]

THE anthropological student may find in the traditions and observances of the Japanese innumerable interesting details.

Human sacrifice appears to have been practised, and, if we may judge by the numerous legends handed down, was not entirely suppressed until long after the period when clay images were introduced as a substitute.

One of the earliest poems is attributed to the lover who rescued a maiden from being sacrificed to the "Dragon of the Mountains;" and a similar legend of later date includes a "dog" as assisting in the rescue.<sup>1</sup>

<sup>1</sup> See "Folk Lore Record," vol. i: 'Some Japan Folk Tales,' by C. Pfoundés; and Sir E. Reed's work, p. 63, vol. ii.

Marriages are by the Japanese said to be made in Heaven, and that the myriad of divine spirits that guard the Japanese assemble annually to assort the aspirants to matrimony.<sup>1</sup>

Immolation of the followers of great personages appears to have been observed, and was called "following the dead" (*Jun shi*).<sup>2</sup>

One of the ancient wrestlers (or gladiators, as they really were in those days) distinguished himself, and gained the favour of the Emperor; he turned his influence to good account, and succeeded in having clay images introduced as a substitute (about A.D. 3).

Self-sacrifice of another kind was not unknown. A notable instance is recorded as occurring in the second century A.D., when *Tatchibana Hime* threw herself into the waves to appease the demon of the storm, and save her lord and master and his followers, when on an expedition against the revolted aborigines of the north-eastern provinces.

Numerous legends of visits to the depths of the ocean, of fabulous and miraculous incidents in war and love-making, embalm curious traces of strange and highly interesting customs in Old Japan. Buddhism brought with it a great deal of Indian and other continental observances, and stories of superhuman agencies.

Many customs and observances are local, but those most commonly practised by the people of the metropolitan districts (Yedo, now called Tokio) are more or less generally observed.

At an early period of gestation, an auspicious day is found by the astrologer or local soothsayer, and a feast is arranged, and the abdomen of women about to become mothers is tightly engirdled with a broad bandage, dyed pink. Although every gentleman and gentlewoman of Old Japan had each their own separate apartments, &c., the separation was more strictly observed after the pink girdle was adopted. When the time of travail arrived, the usual course was to place the mother seated in the peculiar Japanese posture, with the lower extremities doubled under, not cross-legged, a bag of rice under each arm, and another at the back, with a litter of straw underneath; hence a Japanese proverb similar to our own vulgar saying of a "woman being in the straw."

The disposal of the placenta is a matter of some importance to avert misfortune from mother or child; then the infant is not allowed the breast for nearly three days, and is dosed often with the horrible decoction used for staining the teeth, composed of water that had become putrid in an old teapot in which were contained a quantity of old rusty nails.

<sup>1</sup> See "Fu-so Mimi Bukuro," 'A Budget of Japanese Notes,' by C. Pfoundes.

<sup>2</sup> Confucius denounced a similar custom ("Fu-so Mimi Bukuro," p. 96.)

The third day of the third lunar month is the great annual girls' festival, whilst the fifth day of the fifth month is the boys' holiday, and these form two of the nine great annual festivals. Ceremonial and complimentary visits, congratulatory temple to feasts, visits to local and other shrines, the family calls and pay reverence to the manes of ancestors, or to the graves, are also conducted at stated periods, and with much ceremony.

The naming of the infant is a matter of importance, and there are strictly prescribed rules.

The tonsure, or shaving of the infant's head, male or female, is also a matter of strictly-adhered-to observance at several periods, as also the sumptuary laws of breeching the boy, and encircling the girl with the broad girdle.

If there is a numerous progeny, the surplus children are moved off into other families; if girls abound, and there is no male heir, a boy is adopted to become the husband of a daughter; or in case of there being no issue, a boy is adopted, and then a girl from a suitable family taken to be his wife in good time.

The sons of the tradesmen often travel about seeking work, and see the world; the young gentlemen also travelled to learn, and visited celebrated fencing-masters or classical scholars, becoming pupils for a period.

Runaway matches are by the Japanese said to be rarely happy; nor is intermarriage between near relatives deemed expedient; the children, it is believed, will be sickly and both physically and mentally feeble, whilst their offspring will be most likely to be even more so. There is a curious exception to this.

The birth of twins of opposite sex is not of frequent occurrence, but it is not considered wise to separate them throughout life. These marriages rarely result in issue, it is said by native authorities.

There is a very simple expedient adopted by the "lying-in nurse" of Old Japan; if a child of peculiarly striking deformity or malformation is born, a sheet of soft wet paper placed over the infant's nostrils and mouth speedily settles the matter quietly and finally.

When the succession is settled, and the future head of the family becomes competent to take an active part in the affairs of life, the elders retire gradually into privacy, quietly guiding with their matured advice the conduct of official or trading business, and devoting the ample leisure thus insured them to cultivating literary or artistic tastes.

As death approaches, the fear of an unknown hereafter arouses them to piety and "good works,"—repairing shrines,

decorating the graveyards of ancestors, or the memorial tablets in the temple, in charity pilgrimages, &c.

The funeral rites and customs attending death vary considerably according to the social position of the deceased, and the sect of Buddhists to which he belonged. Those for the observers of "Pure Shinto," untainted with Buddhism, again, differ altogether from the former. An account of these is therefore reserved for a future occasion.

Some funerals were conducted with privacy and an absence of ostentatious display.

Poor people bury their dead at night to hide their poverty.

Cremation was only practised by certain sects of Buddhists, but it has extended greatly of recent years, although the non-Buddhistic class are not in favour of this practice—in fact, recently for a time succeeded in having it prohibited; but the subject was taken up abroad, and the travelled Japanese succeeded in having the edict repealed.

The coffin is not always burned, and even for the poorer class there was no separate cremation furnace. A long pile of wood, with the bodies laid on it in a row, answered the purpose, the relatives keeping watch, and sometimes quarrelling over the remains for their possession.

Small jars, 6 to 12 inches, of unglazed ware were used to contain the ashes, which were gathered with one wooden and one bamboo stick, forming simple tongs.<sup>1</sup>

The subdivision of the ashes was not uncommon, as by inter-marriage relatives would belong to various sects, and have those who had gone before buried elsewhere, and it was to be desired that at least some portion of the ashes should be buried with their forefathers. Those who could send the ashes, or a portion, to the Mecca of Japan, or to the locality of some celebrated shrine or temple, often did so. The temple of Kobodai shi, in Koya San Kishin, is a favourite repository for these.

The periods of mourning vary, but for parents fifty days is observed; business is neglected, the razor not used, and a vegetable diet only of the sparest kind partaken of, daily visits to the grave and temple, with prayers at home, occupying the time. Other temples or shrines must not be visited, as relatives of the dead are "unclean" for one year.

Brothers and sisters, husbands and wives, uncles and aunts, and the first-born children call for twenty days' mourning, and are for ninety days unclean; other relatives ten to three days, and

<sup>1</sup> Chopsticks of two different kinds of material would not therefore be used with food. Nor would hot and cold water be mixed, as used for the washing of the dead, by pouring hot water into cold.

impure from four to seven days, according to the degree of consanguinity; for children under seven, one day only is observed.

Suicide is not so common in Japan as in some other countries, for many of the causes that prompt suicide elsewhere do not bring pressure to bear upon the Japanese.

Disappointed women, but oftener jealous women, commit suicide; shame rarely prompts the deed as with us.<sup>1</sup> The Japanese prefer to drown themselves in a river, or even in a deep well, filling the long loose sleeves with stones to sink them; lovers' quarrels, or the fading of personal charms, is not an uncommon motive. Two lovers will even die in each other's arms, with a girdle, usually the girl's, tied round them both. Men deeply in debt sometimes drown themselves.

Hanging is less resorted to by women than by men. There are trees in Japan that have an evil repute, where men have hung themselves, it being believed the trees are possessed with a vampire-like demon or spirit, and magic powers of fascination.

A man and woman agreed to hang themselves by the same rope thrown over a tree; his weight carried her up, and he reached the ground uninjured; thinking better of it, he untied himself and ran away, but was surprised to meet the very next day the woman, who had also when released changed her mind and decided to live a little longer.

Women, again, frequently cut their throats or injure themselves so as to bleed to death; men rarely commit suicide in this manner.

Suicide by poison or by firearms is not common.

The notorious happy despatch is an exception, as cutting the throat, as well as ripping the abdomen, is part of this ceremony.

The official abdomen ripping is not recorded earlier than the twelfth century, and it was in the sixteenth or seventeenth century that it became regulated, and the ceremonial a strictly official matter.

Few instances are on record of a woman attempting this method: it was only in the rare case of an Amazon-like native.

In the wedding outfit of the brides of the nobles a couple of poisonous beetles (male and female), placed in a lacquer box, formed part of the trousseau; these were for the wife to swallow, either to save her honour, or to expiate her unfaithfulness.

<sup>1</sup> Fathers rarely desert their offspring or the mothers of their children, as is too often done in "Christian" lands nearer home.



## DISCUSSION.

Miss BUCKLAND wished to know whether Mr. Pfoundes had noticed among the Japanese or Ainos any trace of the use of white paint on the face by way of mourning. She observed that the custom of painting the face with streaks or patches of white for mourning exists, as is well known, in the Andaman Islands and in Australia, and her attention had lately been called to the prevalence of the same custom among a tribe in California, the paint in the latter case being composed of the ashes of the deceased. It would seem possible that the custom might have been conveyed through Japan, although the masks exhibited by General Pitt Rivers from the South Sea Islands, most of which had streaks of white paint round the forehead or on the cheeks, seemed to show some traces of its use there also, as probably these masks were associated with religious and funeral rites.

A JAPANESE GENTLEMAN also added some interesting particulars confirming the lecturer's statements, especially about human sacrifice, stating that an arrow was placed in the roof of the hut of the intended victim as a token or warning; also that Chinese classics taught gentlemen to control their countenances with dignified and calm exterior.

Signor PAGLIARDINI, Mr. HIGHTON, Mons. BERTIN, and the PRESIDENT also took part in the discussion.

Mr. PFOUNDERS, in reply to a question of the President with regard to the absence of nobility of expression in the Japanese portraiture, said that this arose from the conventionality of that branch of art in Japan. The nobility of feeling and thought and action existed to a remarkable degree, together with great culture and a high degree of intellectual and artistic intelligence and refinement. Confucius condemned human sacrifice, and it was only just before our era that a great champion wrestler was rewarded by the Emperor with an hereditary title for his efforts to substitute clay images for human beings at burials.<sup>1</sup> With regard to Miss Buckland's question, the author said he could not call to mind any details as to painting the face of the mourners; the females, he thought, on the contrary, did not use white powder when in mourning. In putting forward the crude results of his searches in out-of-the-way corners, he did so hoping to incite others to follow up these interesting subjects, more especially that he no longer had the opportunity to increase his own store of curious and interesting particulars about old Japanese rites and customs.

<sup>1</sup> Vide "Masonic Monthly," Sept., 1882, and "F. M. B.," p. 155.

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APRIL 25TH, 1882.

HYDE CLARKE, Esq., *Vice-President, in the Chair.*

The Minutes of the last meeting were read and confirmed.

The following presents were announced, and thanks voted to the respective donors:—

## FOR THE LIBRARY.

- From the SECRETARY OF STATE FOR INDIA IN COUNCIL.—Punjab Customary Law, by C. L. Tupper, C.S.  
 From the AUTHOR.—Etnologia Bolognese, by A. Rubbiani.  
 From the MUSEUM.—Bulletin of the American Museum of Natural History. No. 1.  
 From the ACADEMY.—Atti della R. Accademia dei Lincei. Vol. VI, Fas. 9.  
 From the ASSOCIATION.—Transactions of the National Association for the Promotion of Social Science. Dublin, 1881.  
 From the SOCIETY.—Bulletin de la Société de Borda à Dax. 1882. No. 1.  
 — Journal of the Society of Arts, Nos. 1533–35.  
 — Transactions of the Royal Society of Edinburgh. Vol. XXX, Part 1.  
 — Proceedings of the Royal Society of Edinburgh. Session 1880–81.  
 — Journal of the North China Branch of the Royal Asiatic Society. Vol. XVI, Part 1.  
 — Journal of the Royal Asiatic Society. Vol. XIV, Part 2.  
 — Royal Asiatic Society, Ceylon Branch. Proceedings, 1881.  
 — Proceedings of the Asiatic Society of Bengal. January, 1882.  
 From the EDITOR.—Revue Scientifique. Tom. XXIX, Nos. 14–16.  
 — “Nature.” Nos. 649–651.  
 — Bulletino di Paletnologia Italiana. 1882. Nos. 1–3, and Index.  
 — Correspondenz-Blatt. April, 1882.  
 — Revue d'Anthropologie. April, 1882.  
 — American Antiquarian. Vol. IV, No. 2.  
 — Revue d'Ethnographie. Tom. I, No. 1.

It was announced that ALFRED MORRISON, Esq., F.R.G.S., and FREDERICK HAROLD, Esq., had been elected Members of the Institute.

Mr. E. H. MAN read the second part of his paper “On the Aboriginal Inhabitants of the Andaman Islands,” which is printed at p. 117, *et seq.*

## THE DEATH OF MR. DARWIN.

Mr. HYDE CLARKE said that in the absence of the President, from indisposition, he had to comply with the instructions of the Council with regard to the death of him whose memory was present in the minds of all. The Council had that day passed a vote of sympathy with the Darwin family, and named a deputation of the Past Presidents, Vice-Presidents, and other officers of the Society to attend the funeral on the morrow in Westminster Abbey. Charles Darwin was connected with them by more than one tie. He had been elected an Honorary Member of the older Society, the Ethnological, then of the Anthropological Society, and on the fusion of the two he became in due course an Honorary Member of the Anthropological Institute. He (Mr. Clarke) could look back with some others to the old epoch of the Ethnological Society, when anthropology was a recognised science, in virtue of which that society existed; but a new era undoubtedly began in the advance instituted by their honoured members—Charles Darwin and Alfred Russell Wallace. It was true that Darwin had popularised their science, but he had done very much more in making an impression on the thought of the world more marked than had been effected by any other man in his own lifetime. Of those labours of Darwin it was not necessary for him there to speak, for they were familiar to all present. Darwin had not contributed papers to their memoirs, for the works in which the results of his investigations were consecrated made claim enough on his time. He was, however, ever ready to give them the benefit of his counsel, as he (the speaker) remembered when the friends and associates of Darwin on the Council of the Ethnological Society—Sir John Lubbock, Professor Huxley, Sir Joseph Hooker, and others, claimed his aid in our behalf. In discharging the formal duty imposed on him, he was glad that Professor Flower was present to support what he had said, or rather to supply what he had omitted.

Professor FLOWER could not allow the opportunity to pass without stating how fully he sympathised with all that the Chairman had said about Mr. Darwin's work, and without adding a few words in reference to Mr. Darwin's character. To the value of the first the unanimous testimony of the civilised world had been abundantly given in the numerous notices that had appeared since his death. The latter, although it shone through every line that he wrote—so simple, so transparent and truthful he was in all he did—only those who had the great privilege of his personal friendship could fully estimate. It was, however, as much his worth as a man as his greatness as a philosopher that had called forth the expressions of homage now paid to him by persons of all parties and all creeds, and had procured for him the honour, so rarely accorded hitherto to men of science, of a funeral among the most illustrious of our countrymen, in our venerable Abbey.

MAY 9TH, 1882.

Major-General PITT RIVERS, F.R.S., *President, in the Chair.*

The Minutes of the last meeting were read and confirmed.

The following presents were announced, and thanks voted to the respective donors:—

## FOR THE LIBRARY.

- From the AUTHOR.—Die Südafrikanische Vogelwelt. By Dr. Emil Holub.
- Alcohol: a Factor in Human Progress. By W. Sharpe, M.D.
- On the Origins of Caste and Tribal Names, and the Practical Value of Ascertaining Them. By Lieut. R. C. Temple.
- From the GEOLOGICAL SURVEY OF CANADA.—Report of Progress for 1879-80, with Maps.
- From the SOCIÉTÉ IMPÉRIALE DES AMIS D'HISTOIRE NATURELLE, MOSCOU.—Transactions, Tom. XXXVII, liv. 1; Supplément No. 2; Tom. XLI, liv. 1; Tom. XLII.
- From the BERLIN ANTHROPOLOGICAL SOCIETY.—Zeitschrift für Ethnologie, 1881, Heft 6; 1882, Heft 1.
- From the SOCIETY.—Transactions of the Geological Society of Glasgow. Vol. VI, Part 2.
- Boletim da Sociedade de Geographia de Lisboa. 2<sup>a</sup> Ser. Nos. 9, 10.
- Proceedings of the Royal Geographical Society. Vol. IV, No. 5, May, 1882.
- Journal of the Society of Arts. Nos. 1536, 1537.
- From the ACADEMY.—Atti della R. Accademia dei Lincei. Vol. VI, Fas. 10.
- From the ASSOCIATION.—Report of the Fifty-first Meeting of the British Association, held at York in August and September, 1881.
- From the EDITOR.—"Nature." Nos. 652, 653.
- Revue Scientifique. Tom. XXIX, Nos. 17, 18.

The election of HENRY LING ROTH, Esq., was announced.

Mr. G. M. ATKINSON exhibited, on behalf of Mr. Lambton Young, a Palæolithic flint implement from the bed of the Thames; and, on behalf of Mr. A. G. Geoghegan, an ancient jet ornament from Garvagh, Co. Londonderry.

Mr. WORTHINGTON G. SMITH exhibited a palæolithic implement found by himself in an excavation for a new house on Battersea Rise, near Clapham Common, on one of the higher

terraces of the Thames. He expressed his belief that the few implements found in the Thames had been washed down from the high terraces, either north or south of the river, where implements are very frequent.

Mr. SMITH also exhibited some large and heavy implements from Broom, Bedford, Southampton, and Mildenhall, the largest being  $9\frac{3}{4}$  inches long, and the heaviest more than 3 lbs. in weight. He likewise exhibited a drawing of a very large and rude implement found by Miss E. A. Ormerod in gravel thrown out from the new railway cutting at Isleworth: the implement, which was a large natural club-shaped block of flint, was artificially pointed and slightly trimmed to shape; it measured 2 feet in length, and weighed 32 lbs.

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The following paper was read by the author:—

ENGLISH SURNAMES, *from an ETHNOLOGICAL point of view.*  
By Dr. BEDDOE, F.R.S.

WHILE following up the subject of the decay of the old Germanic (Reihengraber) type in the German land, I conceived the idea that some indirect light might be thrown upon it by an examination of the admixture of races and classes in England, as shown by the existing surnames.

I therefore examined, in a cursory way, and trusting to my own very moderate knowledge of English surnames, the several lists and documents, an analysis of which is appended to this paper.

The headings of the tables are as follows:—1st, The Peerage of England; 2nd, the Baronets of England; 3rd, the list of county magistrates for Gloucestershire, Herefordshire, and part of North Somerset; 4th, those Members of Parliament who sit for English seats; 5th, the Fellows of the Royal Society; 6th, the Fellows of the R. College of Physicians (these two may represent the *élite* of certain scientific and professional classes); 7th, the members of the University Club, London, as a sample of the upper middle class of England, and chiefly of the metropolis; 8th, the mayors of all the English and Welsh corporations, for two years, deducting re-elected mayors, with the addition of the 26 aldermen of London—these make up exactly 500, and represent chiefly the higher commercial class; 9th, the K.C.B.'s and K.C.M.G.'s; 10th, the Q.C.'s and Sergeants-at-Law; 11th, the subscribers to a Yorkshire book, chiefly from the West Riding.

I have also a series of lists from Bristol. The subscribers to

the Museum represent the upper class of citizens and residents, and the merchants, the lower class of tradesmen; the native in- and out-patients of the Infirmary, make up a kind of social scale of Bristolians. The offenders against Martin's Act are almost all carters or rural labourers, and may represent that class, whose names are hardly to be found in any other accessible list.

There are three lists of farmers: from Eastern and Central Herefordshire, from East Gloucestershire, and from the parts of Gloucestershire and Somerset around Bristol. With these may be compared the list of tenants of Malmesbury Abbey, dating from about A.D. 1300, and nearly corresponding in locality and quality.

The last series, scarcely comparable with the rest, consists of lists of the Society of Friends from several districts, pretty well scattered over the country.

It may be as well to explain also the way in which I have classified the surnames.

My method became less imperfect as the work proceeded.

My first Norman class contains only historical names, or such as are known to me to be traceable up to or nearly up to the Conquest, as Percy, Malet, Tyson. The second Norman class contains names of old French form, and patronymics derived from names which did not take root strongly among the English, as Molyneux, Russell, Payne, Drew, Pullen.

My first Saxon class includes most of those ending in ING, the bearers of which are probably lineal descendants of the Saxon aristocracy, whose clan names, though not appearing in Domesday or in charters, were handed down among themselves, and finally, in many instances, become fixed as surnames. Such are Mainwaring (the descendant of the dwellers in Meon, the Jutes<sup>1</sup>), Skelding, Skirving, Billing. The second class includes such Saxon or Danish patronymics as Godwin, Lewin, Alderson, Tovey.

The great local class I have also subdivided. Its first and principal section includes most of the names of specific localities, as Pakington, Hartley, Mytholmroyd, the majority of which names probably belonged to the owners or tenants of the places indicated, though many were assumed to denote the places whence their bearers came. The second class contains all generic local names, as Hill, Attwood, Slade: these must have been borne originally by the smaller tenants or landholders. With them I have placed also such names as Wiltshire, Oxenford, which we know cannot have been acquired by ownership,

<sup>1</sup> This is an enticing etymology; but the name is usually supposed to be derived from Mesnil-garin, in Normandy.



and which probably belonged to a low, rather than a high, class of the community.

In most cases I have separated, as a third local class, such names as Burgoyne, Fleming, Picard, Maine, Brittan, Norris, which indicate the country of origin of the first bearer.

Names of trade or calling are difficult to classify. I have separated those of ordinary arts and trades, as Taylor, Walker, Lister, from those which are semi-personal, qualifying, or descriptive, as Palmer, Franklin, Clerk. With these last I have placed, with some doubt, Frere, Abbot, &c., which may in some cases have been nicknames, but probably indicated as a rule illegitimate descent from the persons pointed at. Sometimes I have made a third class of distinctly rural occupations, as Fisher, Fowler, Hayward, Miller.

*Nicknames*, or personal names, as Reid, Blackmore, Whitehead, require no subdivision.

From the great crowd of patronymics I have usually separated those ending in *son*, which originated in the northern part of the kingdom, for reasons which will subsequently appear.

My *doubtful Welsh* class includes such names as Roberts or Robartes, and Richards, of which the usual English forms would be Robins, Robinson, Dobbs, Dixon, and the like. They are not invariably Welsh, but their comparative rarity away from Wales and the Marches shows that they are usually so.

The undoubtedly Welsh class, including Jones, Pugh, Rees, Vaughan, Bengough, &c., needs no comment.

In the Scotch class I have placed all those names whose owners have at any period belonged exclusively to Scotland. Thus all the Montgomeries in the three kingdoms descend from that branch of the famous Norman race which settled in Scotland; and to Scotland I have assigned them. So with the Hamiltons, Gordons, Barclays. The adoption of this rule leads to scarcely any ambiguity or difficulty: it leaves comparatively few surnames common to England and Scotland, except certain trade names and nicknames and some of the commoner patronymics in *son*, such as Wilson and Watson.

But the same rule could not be applied to Ireland, where the greater part of the surnames of English form are of comparatively recent introduction, and not to be distinguished from those which have always remained English. I have therefore put the Fitzgeralds, Barrys, Burkes, &c., among my Normans, and distributed the mass of Irish names of English form under the several heads appropriate to them. And I have left in my Irish class only the surnames actually coined in Ireland, the O's and Macs, Kavanaghs, Ryans, Dalys, and the like, which belong, roughly speaking, to the Celtic race.

My Foreign class includes all those supposed to have been introduced from abroad during the last two or three centuries: Huguenot, Palatine, French of the Channel Isles, Dutch, Italian, Jewish, &c.

After all I am constrained to leave a great many names, on an average about 9 per cent., in the doubtful class. This includes, no doubt, a good many patronymics and nicknames, as well as corrupted specimens of all the other classes, particularly the foreign one. The author of "The Norman People" would ascribe a great many of them to the Norman category, and I do not doubt that he is right in many instances, but I am unable to test his methods sufficiently. I am, however, much indebted to his book, as well as to those of Lower, Bardsley, and Miss Yonge.

The number of these doubtful names is of course a rough index of the imperfection of the method, at least in my hands. A good many of the names which I *have* made bold to classify are not free from ambiguity of meaning or origin. *Hall* I have assigned to my second local class. But it may in some instances have been derived from the common Norse name, or be a short form of Henry, or of Halbert. *Wood* probably does not always mean an assemblage of trees; sometimes it is a personal name, signifying mad or wrathful. *Peacock* may be a nickname or a patronymic: I have set it down as the latter. A good many of the apparently local names may be corruptions of words less familiar.

One source of fallacy, but not, I think, an important one, is the tendency to get rid of names supposed objectionable by exchanging them for better sounding or more fashionable ones. Thus Jones has actually been exchanged for Herbert, and Bugg, it has been said, for Norfolk Howard. It is a little curious that the name here selected as the type of high aristocratic standing, is by some authorities derived from Hog-ward, a swineherd. For myself I incline, with Mr. Bardsley, to trace it rather to Here-ward or Havard, and rank it with the old Saxon names.

This kind of change has been pretty frequent among the nobility and propertied classes, but not elsewhere. Where property has been in question, the changes have been by no means always in the direction of what we should call the better, the more ancient or more distinguished name. Thus Whitmore and Havelock have been substituted by Jones and Allan. In classifying the peerage I have always taken the original surname of the male line, where it was known to me. As I have said, such changes are not very common in the middle and lower classes. Were it otherwise, such names as Craven (local), and Coward (cowherd) would hardly have been saved by their really innocent derivations from extinction.

The variously selected names applied to bastards and foundlings furnish another complication; but they are probably not numerous. Actors do not, as a rule, transmit their high-sounding assumed names.

In examining my tables, I notice first the large proportion of undoubtedly Norman names still remaining among the Peers. The Peerage also includes a very large proportion of local names of the first class, though not quite so great as the Baronets and county magistrates do. The number of trade names is small, that of nicknames and patronymics moderate, of Scotch names very great, of Welsh ones fair. Nearly the same remarks apply to the Baronets; many of their creations date back to a period when recognisable Norman names were less diffused than now, and they show a larger proportion of them than any other list except that of Members of Parliament. These last, whom I had taken as representative of the monied classes, show their heterogeneous character in their names: the large proportion of Norman ones is due chiefly to the presence of so many scions of noble houses; trade names are fairly represented; Scotchmen and Jews are numerous; Irishmen almost absent. Among the county magistrates the presence of a large proportion of Saxon names is perhaps significant, taken in connection with their yet more frequent existence among the farmers. But it may be a local peculiarity.

The Royal Society and the College of Physicians differ little from the other middle class lists; they have fewer trade names, however, a good many Scotch and foreign names, a few Irish, and a moderate number of Welsh ones.

The list of Mayors of Boroughs has some interest. It probably represents pretty fairly the upper middle class of the towns of England generally. The notable points about it are the great number of patronymics in son, derived originally, if not immediately, from the north of England, the much greater number of Welsh than of Scotch names, and the almost entire absence of Irish ones.

The subscribers to the Bristol Museum and Library indicate the considerable proportion of the commercial classes among them by a moderate decrease of local names and a slight increase of trade names. Welsh names, as in other Bristol lists, exceed 10 per cent.

The lists of farmers exhibit, contrary to what I expected, large proportions of trade names; and this is especially the case in East Gloucestershire, far away from any town which is, or has at any time, been large and important. There are in that part of the county, it is true, several small decayed market towns, whose population may have dispersed somewhat into their rural

neighbourhoods, but this supposition seems hardly sufficient to account for so great an excess of trade names. The list of the tenants of Malmesbury Abbey may perhaps further lessen this difficulty. It shows that in a rural district like North Wiltshire, trade surnames were already common in the time of Edward the First or Second. Perhaps, after all, they would be more distinctive in such a district than in a town of some size, where there were many of the same trade, and may actually have been less frequently coined where the occasion for doing so was apparently most frequent. The other peculiarities of the Malmesbury list are mostly reproduced among the farmers of the present day: such are the frequency of Saxon surnames, and of the second class of local ones. Returning to East Gloucestershire, purely rural trade names, it may be noted, are in large proportion. So too, are the names which I consider to be Saxon, and to have belonged to some of the relics of the Saxon aristocracy who survived the Conquest. Kemble, I think, remarks somewhere that the Saxon Christian names which long survived the Conquest belonged to the upper class. Welsh names are numerous among the farmers, in Upper Gloucestershire as well as around Bristol. Scotch and Irish names, and patronymics in SON, are very few.

Of the small traders of Bristol, and the Infirmary patients there, it may be said that among them the minimum of first class local names is attained. Trade names are numerous among them, but they differ from the farmers in the other points mentioned above. It is noteworthy that foreign and Scotch names are more numerous among the traders, Irish ones in the Infirmary list.

The paucity of Irish names in most of the lists is very striking. Probably a tenth of the inhabitants of the British Isles bear names of Celtic-Irish type, about as many as can be identified by name as Scotch, and perhaps almost thrice as many as are clearly Welsh by name. Yet Scotch and Welsh names greatly preponderate over Irish ones in almost all the lists, except in the Infirmary ones. Notwithstanding the vast Irish immigration into Great Britain of the present century, there has as yet been very little mixture of Irish with English or Scottish blood, and scarcely any rise of the Irish element in the scale of society.

In my Yorkshire list the notable points are the large number of patronymics in SON (while other patronymics are few), and the enormous number of local names, amounting altogether to 40 per cent; this latter peculiarity is probably due to the fact that Yorkshire, about the period of the assumption of surnames, had a scanty and sparse population.

The Quaker lists, in conjunction with some of the others, may help us to appreciate the extent of Welsh and Scotch immigration as well as the rate of mixture of social strata. The society was originally recruited, I believe, mainly from the middle and lower middle classes, and the surnames agree with this idea. Local names are not prevalent among them, while patronymics abound to an extraordinary degree, particularly those in SON. The number drawn from the Celtic nationalities is comparatively small.

The Herefordshire and Gloucestershire lists are especially helpful as regards the proportion of Welsh blood in those parts. A considerable portion of Herefordshire, including most of Archenfield, the country beyond the Wye, was Welsh at the time of Domesday. Whether any part of it remained so up to the time of the fixation of surnames may admit of doubt. Be that as it may, the proportion of Welsh names in the districts in question equals or exceeds the half. That all eastern Herefordshire was quite Anglicised seems to be proved by the fact that Welsh surnames are not more numerous in its more hilly and remote than in its richer and more accessible parishes. I presume, therefore, that all the Joneses and Griffithses, &c., there, are Welsh immigrants or their descendants; and it is curious that they amount to over 20 per cent., besides 7 or 8 per cent. more of the doubtful Welsh type. We have here the usual phenomenon of an afflux of the native race towards the capital and other centres of population, accompanied or followed by an influx of the poorer or hardier race of the neighbouring mountains. Taking Herefordshire altogether the farmers with clearly Welsh names are one-third, and so are the artisans and small shopkeepers, but the upper class with like names are not one-sixth. These proportions gradually decrease as one passes into Gloucestershire and North Somerset, but even in the Cotswold region there are still 7 per cent. of Welsh names.

The descendants of Scotchmen infiltrate in like manner the northern counties. And they and the two more purely Celtic races crowd into the English towns. But, as has already been said with regard to the Irish, they do not equally mix and assimilate there with the natives. Thus the people of Welsh descent, so far as one can judge by the names, hold their own fairly in science; the Scotch do more, the Irish less. Contrary to the current opinion, it would seem that the Welsh rise most in commerce, the Scotch coming after them, and the Irish nowhere. But when one looks to the attainment of military or political distinction, the case is altered. Here the Scotchmen, and especially the Highlanders, bear away the palm; the

Irish retrieve their position a little, and the Welsh are little heard of.

I will end by stating briefly a few more of my deductions from the tables. Some of them I make with confidence, others doubtfully.

The termination in SON was probably not confined in its origin to the Anglo-Danish districts, but extended to the Anglian ones.

Migration from the north of England to the south, and *vice versa*, except to manufacturing centres, was very small until our own times.

The present population of the Welsh Marches is to a large extent derived from Welsh immigration within the last two or three centuries.

There has been as yet nothing like a complete amalgamation in blood of the upper, middle and lower classes.

The class of small landowners and yeomen still, to some extent, represents in blood the Saxon freemen of the 11th century.



	Peers of England.	Baronets of England.	Magistrates of shire, Herefordshire, and Somerset.	M.P.'s for England and Wales.	Royal Society.	Fellow, College of Physicians.	Members of University Club.	Mayors of Towns.	Knights Bath and M.G.	Q.C.'s or barristers-at-law.	Yorkshire Book.
Number ..	433	684	450	500	500	315	1159	500	290	205	835
Norman, 1	11.6	4.6	3.5	8.	2.6	1.3	1.	.6	2.4	2.9	.3
" 2	2.	2.5	3.	.8	2.	1.5	2.2	3.2	5.1	4.4	2.1
Saxon ING	..	..	..	..	..	..	..	..	..	..	..
" others	3.	2.	3.3	2.8	2.4	2.8	2.3	1.8	3.1	2.9	.2
Local, 1 ..	24.7	25.1	25.5	20.6	19.2	19.3	20.5	21.	13.1	19.	1.9
" 2 ..	5.6	4.8	7.3	8.4	4.2	6.7	8.1	8.6	5.5	6.3	11.5
" of country	..	..	1.8	..	..	..	1.3	1.4	2.4	..	.6
Occupations ..	1.1	4.2	6.9	7.6	5.2	3.2	6.4	7.2	4.1	4.4	7.9
" Rural	..	..	..	..	..	..	..	..	..	..	..
" Qualified	7.	9.	4.	3.2	5.8	3.8	2.	1.2	7.	3.4	2.7
Nicknames	2.7	2.3	..	6.4	6.	6.3	2.1	3.	2.	4.8	1.9
Patronymics ..	5.3	6.3	5.5	9.8	11.1	9.5	5.8	7.	4.8	5.8	7.3
" in son	7.7	7.7	10.2	..	..	..	10.6	8.4	6.8	4.8	6.
" Doubtful Welsh	1.1	3.2	2.4	3.4	3.3	5.7	4.7	6.8	4.8	4.8	11.1
Welsh ..	..	..	..	..	..	..	..	1.8	7.	2.9	1.
" ..	4.6	4.5	10.6	5.2	5.4	3.5	4.6	9.8	2.	6.8	1.2
Scotch ..	16.8	15.9	4.	9.4	13.	12.	11.7	3.6	24.*	7.2	4.4
Irish ..	2.8	2.9	..	..	1.8	2.5	1.1	4.	4.5	1.9	.5
Foreign ..	3.4	4.5	2.	5.6	10.2	5.7	5.7	2.	4.1	5.8	1.4
of which French	1.8	2.	..	1.2	3.3	2.5	2.2	.8	..	1.	2
" German	..	..	..	..	4.2	1.9	1.8	.4	..	1.5	7
" Jewish	..	..	..	..	1.6	..	1.	1.	..	2.9	2
Doubtful..	5.9	7.1	9.	7.	7.6	10.2	7.7	9.	9.2	10.7	8.6

\* 7.2 Highlanders.

	Sub- scribers, Bristol Museum.	Bristol Merchants.	Bristol Lower Trades.	Infirmary In-patients.	Infirmary Out-patients.	Bristol Officers, Martin's.	Tenants, Malmesbury Abbey, since 1300. circa.	FARMERS.		
								East and Central Hereford- shire.	East Gloucester- shire.	Round Bristol.
Norman, 1	634	250	1,000	250	1,000	100	689	700	686	1,000
" 2	1.7	8	1.8	.8	.6	2	.9	.4	.7	2.3
Saxon ING	2.3	1.6	1.6	4	1.7	2	3	2.1	1.5	2.3
" others	.8	2	2.6	1.2	1.2	1	1.1	.7	2.1	5.6
Local 1..	2.2	2	12.6	2	1.8	10	6.4	2.1	3.3	14.4
" 2 ..	16.9	14	8	10	10.7	13	15.4	12	15.6	7
" of country	7.6	7.6	8	5.2	7.5	11	15.2	12.3	7.6	16.2
Occupations ..	1.4	.8	.3	.3	1.2	11	2.6	1.4	1.2	16.2
" Rural	9.8	10	8.9	7.6	12.2	8	6.4	7.1	13.2	10.5
" Qualified	3.6	2	2.2	2.8	5.5	2	4.6	3.7	5	19.4
Nicknames ..	8.3	4	4.1	2	10.3	10	4.9	3.6	4	11.3
Patronymics ..	11.8	16	16.8	7.6	14.7	11	11.2	4.1	8.2	5
" in son	3.3	1.6	1.5	18	2.1	2	.1	2	.6	1.4
" doubtful Welsh	2.2	3.6	3.2	7.6	1.7	6	.6	6	3.3	11.3
Welsh ..	10.2	8.4	9.1	10.8	11.1	6	.1	21.8	7.5	1.4
Scotch ..	4.1	4.4	2.3	1.6	2	1	..	1.1	.6	8
Irish ..	1.2	.8	1.9	2	3.7	3	..	..	..	5
Foreign ..	4.5	3.6	3.2	2.4	1.7	..	..	..	..	1.4
of which French	2.5	.4	1.6	1.2	.8	..	..	..	..	8
" German	.3	1.6	.5	.8	.4	..	..	..	..	5
" Jewish	1.6	.8	.7	.4	.2	..	..	..	..	11.8
Doubtful..	7.4	8.8	12	11.2	10.4	11	12	9.4	11.5	11.8

## THE SOCIETY OF FRIENDS.

	London and Middlesex.	Essex.	Bristol, Somers, Wills.	Birmingham.	Warwickshire, Staffordshire, Leicestershire.	Newcastle, Darlington, &c.
Number .. ..	855	302	430	316	208	990
Norman, 1 .. ..	4	..	7	9	..	6
" 2 .. ..	16	3	44 <sup>1</sup>	25	38	13
Saxon in ING .. ..	3	..	7	19	5	7
" others .. ..	16	7	11	22	19	31
Local, 1 .. ..	17	92	13	171	12	167
" 2 .. ..	99	89	44	104	86	95
" of country .. ..	6	..	4	3	..	14
Nicknames .. ..	83	96	83	79	67	7
Trades .. ..	91	153	116	7	72	6
" Rural .. ..	38	16	46	13	14	26
Qualified .. ..	42	46	79	25	72	32
Patronymics .. ..	144	132	186	88	168	63
" in SON .. ..	54	92	58	57	168	188
" doubtful Welsh ..	18	16	28	28	19	1
Welsh .. ..	24	13	46	85	19	17
Scotch .. ..	34	..	4	35	29	89
Irish .. ..	7	3	2	13	..	6
Foreign .. ..	25	96 <sup>2</sup>	7	28	..	18
of which French ..	12	96	2	12	..	5
" German .. ..	12	..	2	16	..	8
" Jewish .. ..	..	..	..	..	..	2
Doubtful .. ..	119	116	88	123	101	85

## DISCUSSION.

Mr. HYDE CLARKE said that the value of Dr. Beddow's paper consisted in its classification—not in its classification according to patronymics, trade names, &c., for that had often been effected, but in the secondary classification of the application of the other series to various classes of society, thus illustrating the real bases of nomenclature, and consequently, as Dr. Beddow wished, to prove the real bases of the population. Thus the result was obtained that English clan names lay at the base; and if this is the case, then it is evident that the percentage assigned is not the true one, but had to be corrected and enlarged to ascertain something like the ultimate figure before the transformation of clan names. When, in the middle ages, local names, trade names, and patronymics were allowed, clan names were displaced, and it is necessary to make an allowance for these. It was to his mind a question whether Smith was always strictly a trade name, or a clan name: for in ancient times that important class held distinct functions. The name of Clarke was evidently not professional: for the large

<sup>1</sup> Mostly Graces.

<sup>2</sup> All these are persons named Marriage, of Huguenot descent.

number of persons now possessing it was out of proportion with the professional number in the middle ages. One reason assigned for the name was probable: that it represented the descendants of the married secular or parochial clergy. A useful comparison, which would define the facts, could be obtained from comparison with the Directories of Paris, Rouen, Belgium, Holland, and Hamburg, not only for the trade names, but for epithets like Black, Brown, &c. These latter would in France be nicknames, and not clan names. The trade names have a particular significance, and require special attention in Dr. Beddoe's scheme. These do not represent the lowest class, nor do they represent the thanes; but in a more proper sense, a middle rather than an artisan class. In the middle ages, or at other times, it was not the pauper who became a Miller, Brewer, Maltster, Tanner, Butcher, Baker, &c.; neither did he become a Smith, Wright, &c. These were recruited rather from the younger sons of the yeomanry. In this way the proportion of trade names was an index of the share of the well-to-do people in the several classes of society mapped out by Dr. Beddoe. The flux and reflux of this trade class to and from London and the great towns affected the proportions. If the Great North Road were taken, for instance, a regular distribution of the same family names, clan, trade, and others, would be found pointing towards London, and so of other roads and towns. Thus local distribution was affected. So, as London was entered from the east, north, south-west, or south-east, would names be found on the shops and in the streets derived from the outer regions. In fact, Dr. Beddoe had opened a wide field of inquiry, in which he had already laboured with that scientific skill and interest which distinguished his works.

Mr. R. B. HOLT, Mr. J. PARK HARRISON, Mr. PRIDEAUX, Mr. G. M. ATKINSON, Mr. C. ROBERTS, and the PRESIDENT took part in the discussion.

Dr. BEDDOE briefly replied. He said that he was willing, with Mr. Hyde Clarke, to go somewhat further than he had done in his paper in the matter of survival of English clan names. As for patronymics in S, he was far from saying that they were all Welsh. Doubtless the English (in the south especially) often formed patronymics in that way; but as a rule they first cut down the Christian name, and appended the S to the abraded form; thus you had Robb and Robertson in Scotland, Robson and Robinson in Northumbria, Robins and Dobbs in southern England, but Roberts chiefly in Wales. So, too, Phipps in the south, Phipson and Philipson in the north, Phillips in Wales.

As for Cornish patronymics, they had been pretty thoroughly investigated; and their old fellow-worker, Dr. Charnock, had published a little volume on the subject, entitled "*Patronymica Cornu Britannica*."

The following paper was then read by the author:—

*On the SURVIVAL of certain RACIAL FEATURES in the POPULATION of the BRITISH ISLES.* By J. PARK HARRISON, M.A.

AT the York meeting of the British Association, a selection of photographic portraits, collected by the Anthropometric Committee from various parts of the country, and arranged on cards for facility of comparison, showed conclusively that very different types and sets of features are still to be met with, especially in localities which we know from history, or may infer from evidence derived from archæological research, were colonised by different races. In parts of West Sussex, for instance, profiles occur which contrast strongly with others commonly called Norman, of a more prominent character, in the same division of the county, as well as with some closely resembling them in Cleveland in Yorkshire and the Flegg district in Norfolk, both of which localities are said to have been peopled by the Danes. As features of much the same type, however, are not uncommon in other parts of the United Kingdom, if they represented exclusively the Danish element of the population, Norse blood, on such assumption, must have exerted a more extensive influence upon the national physiognomy than history permits us to think probable.

In an oral communication at the same meeting, I was able to state, as the main result of several weeks' visit to Denmark, Sweden, and part of Germany, undertaken in the autumn of 1880 for the purpose of examining the features of the populations, that the profile of the Dane proper, whilst agreeing with that assumed to be Danish in this country, differed as much, and in almost precisely the same way, from the Swedish and Teutonic profile, as in the case of the two fair Sussex types first alluded to. The name systems also appeared to be quite dissimilar. Indeed, the common occurrence of the patronymic "SEN," in Sleswick, was urged by the Danish Government, after the Prussian War, as affording strong evidence that the Duchy was not inhabited by a German, that is to say, Teutonic race.<sup>1</sup>

Now the Danish profile proper, which corresponds with the

<sup>1</sup> On counting the number of names upon tombstones and crosses, in Kōrsor cemetery, which terminated in "SEN," I found 75 per cent. with the patronymic. At Malmœo, in South Sweden, the proportion was exactly reversed. The same result was obtained on copying names in Lund cemetery. The names ending in "SEN," in Sweden, perhaps belong to families descended from the old Danish possessors of the country, as well as immigrants in recent times. Further north, it is believed that Teutonic names are almost universal. Thus in the list of Swedish antiquaries, compiled for the International Congress at Stockholm, 10 only out of 160 appear with the patronymic.

skeleton features of skulls from early tumuli in Denmark, is common in Sleswick. It is also met with in Holstein; on the Rhine (near Cologne); in Belgium; and in France. It appears from early skulls in the museum of the Anthropological Society of Paris, as well as some found in Wiltshire, which Dr. Barnard Davis considered to belong to that people, to resemble the profile of the Belgæ,<sup>1</sup> who, it is now believed by the majority of English and French authorities, were a Cymric tribe, Teutonised perhaps, to some extent, by long residence in Germany.<sup>2</sup> The type of the people of the round-barrows in this country, as shown by their osseous features, was also almost identically the same. Dr. Thurnam, writing on this subject twenty years ago,<sup>3</sup> says: "I must confess that the correspondence between the skull form of the ancient brachycephalic Briton, Gaul, and Scandinavian" (*i.e.*, Dane), "and that of the modern Finn, so very much exceeds any difference which may be traced in them, that I should have no difficulty, on sufficient evidence, in admitting their common parentage and descent."

The similarity between the round-barrow and early Danish skulls, and the survival of the type at the present day, has also been observed independently by other eminent anthropologists. Dr. Rolleston, in particular, writing in "British Barrows," says: "There is no doubt that this variety of the brachycephalic skull has survived amongst us in modern times. Dr. Beddoe,<sup>4</sup> for example, and Professor Virchow<sup>5</sup> have both specially remarked upon the likeness borne by certain modern Danish heads to some of the ancient Borreby crania; and the same features exist in many of not the least vigorous of our own countrymen."<sup>6</sup>

There is, however, another type of profile in the north that dates from early times. In his address to the Anthropological department, at Bristol, in 1875, Rolleston stated that Professor Retzius was of opinion, and, with a few qualifications, he thought that the more recent Swedish ethnologists would agree with him, that the modern dolichocephalic Swedish cranium was very closely allied to, if not an exact reproduction of the Swedish cranium of the stone period. "There can be no doubt," he adds, "that the Swedish cranium is very closely similar indeed to the Anglo-Saxon; and the skulls which still conform to that type amongst us will be by most men supposed

<sup>1</sup> "Crania Britannica," xxxii, 42.

<sup>2</sup> This was suggested by Higgins of the Cymri. "Celtic Druids," p. 98, 1827.

<sup>3</sup> "British and Gaulish Skulls," "Mems. Anthropol. Soc.," vol. i, p. 512.

<sup>4</sup> "Mems. Anthropol. Soc. Lond.," vol. iii, p. 283.

<sup>5</sup> "Archiv für Anthropol.," vol. iv, p. 71.

<sup>6</sup> "British Barrows," p. 676.



to be the legitimate representatives of the followers of Hengist and Horsa; just as the modern Swedes, whose country has been less subjected to disturbing agencies, must be held to be the lineal descendants of the original occupiers of their soil."<sup>1</sup>

Now the rationale of this "permanence of type"<sup>2</sup> has been recently treated by Professor Kollmann, of Bale, who strongly upholds the view that crossing affords the true explanation of the existence of various races of man. He finds that change takes place earliest (in case of mixture) in the colour of the hair and eyes (and it may perhaps be concluded also in the softer tissues), the form of the skull resisting longest any alteration; and though it too at length gives way, a complete fusion of the component elements is never absolutely effected.<sup>3</sup>

This quality of persistence in the skull to preserve its primitive type, Professor Kollmann observes, is of prime importance: for it enables us to distinguish in a mixed population the original or main racial elements that contribute to its formation. In common with Barnard Davis, Beddoe, Flower, Rolleston, Thurnam, Turner, and others in this country, and Morton, Broca, De Quatrefages, and Virchow abroad, he believes that prehistoric types survive at the present day. Professors De Quatrefages and Hamy, indeed, go even a step further, and express a strong conviction that the Neanderthal and Cro-Magnon men are represented amongst us through atavism.<sup>4</sup>

Induced by this consensus of opinion regarding the survival of racial characteristics, amongst craniologists of such distinction, a definition has been attempted of the more striking features of two of the principal races from which the population of this country is descended—the round-barrow men and their affined tribes, and the Saxons and Teutons proper.

The skeleton profile of the first of these types, as shown in the plates of the "*Crania Britannica*," is so marked that it might perhaps have sufficed to refer to some one of the examples selected by Davis and Thurnam to illustrate it. It appeared, however, to be the better plan to make tracings of the more distinctive portions of several profiles, and then superimposing them, at the same angle, obtain average contours; and it was found that this could be best accomplished by grouping the skeleton features from three counties, viz., York, Wilts, and Derby, each of which furnished six examples for the purpose. The means are accurately reproduced in the following figures:—

<sup>1</sup> Report Brit. Assoc. for the Advancement of Science, 1875, p. 148.

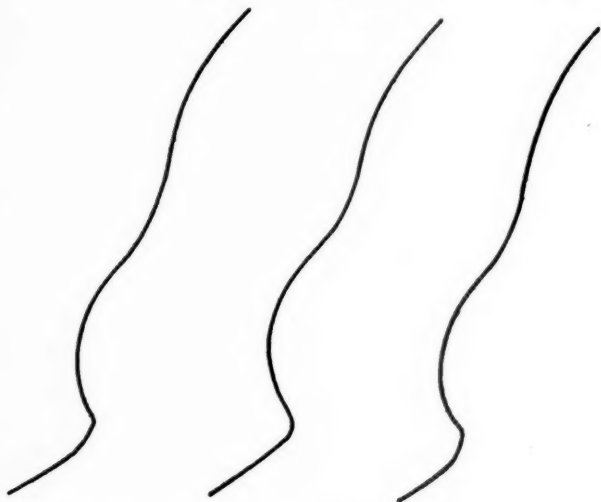
<sup>2</sup> An expression made use of by Dr. Beddoe many years back.

<sup>3</sup> "*Revue Anthropologique*," 1882, p. 161.

<sup>4</sup> "*Crania Ethnica*," p. 28. See also Thurnam, "*Mems. Anthropol. Soc.*," p. 519.

Fig. 2, derived from the Wiltshire skulls, includes three ascribed by Dr. Davis to the Belgæ.

FIG. 1.      FIG. 2.      FIG. 3.



The constant characteristics in the mean profiles, it will at once be seen, are the prominent brow-ridges, and the sharp angle at which the nasal bones start from the root or nasal suture, indicating, even in those cases where but a small portion of the dorsum remained perfect, that the nose was high-bridged or considerably arched, a conclusion rendered more certain wherever the nasals were in a perfect condition.

The other main osseous features of the round-barrow men, as described by Dr. Barnard Davis, Dr. Rolleston, and others, are their high cheek-bones, long upper jaw, oval face, and prominent and fine chin.

In living subjects, where all the above characteristics are present, they are very generally found to be associated with a stature above the average, fair hair and eyes, thin lips, and a pear-shaped ear, distinguished, when pure, by the absence of any proper lobe; in other words, the fossa, which exists in all ears between the helix and anti-helix, continues without interruption, without any boss or welding, up to the cheek itself.<sup>1</sup>

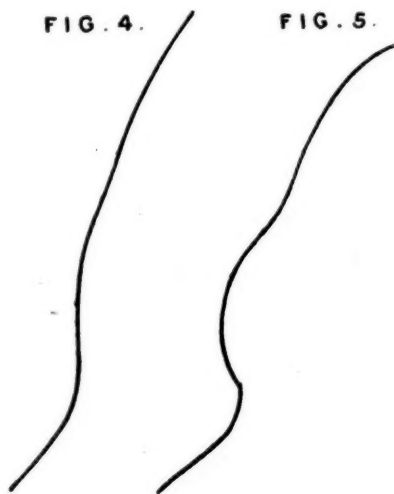
It can scarcely be doubted that where all the above charac-

<sup>1</sup> A continuous channel is frequently found in the ears of individuals of mixed descent, as well as some projection in the nasal bones; but in such cases there will always be a thickness in the lower rim of the ear, and more or less undulation or sinuosity in the nose, which is not found in true types.

teristics are present, and the skull has a tendency to brachycephalism, an individual may be safely predicated, in this country, as belonging to the round-barrow race.

The identification of the second main type, which is supposed principally to have influenced English physiognomy, and is commonly called "Anglo-Saxon," presented greater difficulty, and required a somewhat different mode of treatment. The average skeleton profile of the round-barrow men being taken as a standard of comparison, and tracings made, in the same way as before, of the osseous features of the nine Anglo-Saxon skulls selected as examples of that type in the "*Crania Britannica*," on examination three of the profiles were found to exhibit so much divergence from the remaining six that it was decided to keep their contours separate.

The tracings of the six homogeneous profiles having been superimposed, and an average contour obtained, it showed a marked contrast to that of the round-barrow type: whilst the mean contour of the three divergent profiles indicated either considerable mixture of blood, or a different racial origin altogether (*see* figs. 4 and 5).



It was found also that the average profile, in the case of fig. 4, differed but slightly from each of the several tracings. The mean of the three Anglo-Saxon profiles comprised in fig. 5 resembles more nearly the round-barrow type: and this, it is important to note, is not to be attributed to any sexual pecu-

liarity, all the examples of Anglo-Saxon crania, with one exception (a skull from Long Wittenham), being male.<sup>1</sup>

The contour in fig. 4 differs from the profile of the round-barrow men in the following particulars: the brows are less prominent, the forehead more vertical and rounded, and the nasal bones less projecting—in fact, they start at an angle that precludes any possibility of the living subjects having possessed a high-bridged nose.

Following Professor Flower's method of determining profile-projections by dimensions taken very carefully from the basion, or anterior portion of the *foramen magnum*, the projection of the dorsum in skulls, with perfect basions and nasal bones, was next ascertained by measuring the distance, first to the centre of the nasal suture, and then to the point of maximum projection of the nasals: the difference between the two dimensions being taken arbitrarily as the nasal projection. Three skulls were selected for experiment in the museum of the Royal College of Surgeons. The first was the skull of a Scotch Highlander, the second a Gaul of the Roman period from Acheul cemetery, and the third a Persian, each presumably once possessing an aquiline or high-bridged nose. The following was the result:—

No. 1.	Nasal projection	·30 inch.	(·80 cm.)
„ 2.	„	„	·25 „ (·65 „)
„ 3.	„	„	·25 „ (·65 „)

Subsequently four skulls of the round-barrow type, in the Greenwell collection at Oxford, were submitted to measurement in a similar way. They comprised the whole of the specimens that were sufficiently perfect to allow of comparison. The mean result was as follows:—

Nasal projection, ·22 inch (·58 cm.)

Three skulls from round-barrows in England, and one from Ireland, in the Cambridge Anatomical Museum, were also measured under similar conditions, and with the same result:—

Nasal projection, ·22 inch (·58 cm.)

Contrasted with the above results, the mean nasal projection in four Anglo-Saxon skulls in the museum of the Royal College of Surgeons proved to be considerably less, notwithstanding

<sup>1</sup> The skulls, which exhibit features resembling the earlier types, were derived from cemeteries at Fairford, Brighthampton, and Litlington.

Dr. B. Davis, speaking of the skull from Fairford, says the evidence pointed to its being mixed—British and Anglian; and the Brighthampton skull is described as being very similar to it. The Litlington cranium is very dolichocephalic, with narrow walls, probably more Iberian than Saxon.

Dr. Beddoe informs me that the largest and finest skulls were selected for the plates in the “*Crania Britannica*.” Objects buried with later interments are not always evidence that the owners were Saxons.

that in one instance (an East Anglian skull from Linton Heath cemetery) the nasal bones were very prominent. The mean result was:—

Nasal projection,  $\cdot 12$  inch ( $\cdot 30$  cm.)

Finding from experiment that half-an-inch ( $1\cdot 25$  cm.) in length of the nasal bones, measured from the suture, sufficed to show the angle of projection, and when this was acute, that the nose would have been necessarily high-bridged, or strongly arched; and when obtuse, either straight or incurved; eighteen crania out of forty in the fine collection of Anglo-Saxon skulls made by Dr. Thurnam, which were presented to the University of Cambridge by Professor Humphrey a few years ago, proving sufficiently perfect for the purpose, the projection of the nasal bones was ascertained in the same way as before. The results of the measurements will be seen in Tables I and II, in which the male and female skulls are kept separate:—

TABLE I.

TEN MALE ANGLO-SAXON SKULLS.

Museum No.	Nasal projection.
238 .. .. .	.. $\cdot 05$ in.
*244 .. .. .	.. $\cdot 10$ "
245 .. .. .	.. $\cdot 00$ "
*247 .. .. .	.. $\cdot 10$ "
249 .. .. .	.. $\cdot 05$ "
258 .. .. .	.. $\cdot 00$ "
261 .. .. .	.. $\cdot 10$ "
*268 .. .. .	.. $\cdot 15$ "
*270 .. .. .	.. $\cdot 15$ "
273 .. .. .	.. $\cdot 00$ "
Average	$\cdot 040$ " ( $\cdot 10$ cm.)

TABLE II.

EIGHT FEMALE ANGLO-SAXON SKULLS.

Museum No.	Nasal projection.
240 .. .. .	.. $\cdot 00$ in.
250 .. .. .	.. $\cdot 05$ "
264 .. .. .	.. $\cdot 05$ "
265 .. .. .	.. $\cdot 00$ "
266 .. .. .	.. $\cdot 15$ "
267 .. .. .	.. $\cdot 05$ "
269 .. .. .	.. $\cdot 05$ "
282 .. .. .	.. $\cdot 05$ "
Average	$\cdot 012$ " ( $\cdot 03$ cm.)

The numbers in Table I show, on the average, greater projection in the male than in the case of the female nasals; but this is

due to the prominence of the nasal bones in the four crania distinguished by an asterisk; and these skulls were derived from three cemeteries, Fairford, Kilham, and Long Wittenham, in all of which were mixed interments. That the skulls in question were male examples does not account for the greater projection of the nasals, for in the remaining six male skulls no tendency of the kind is shown. So, too, with the facial skeletons of "Anglo-Saxons" in the "*Crania Britannica*," before alluded to, five out of eight male examples exhibit slight nasal projection, and it is of some importance to note that two of the three exceptions are considered by Dr. Davis "East Anglian." In profile they resemble the osseous features of the round-barrow type more nearly than the Saxon. It should be mentioned that Dr. Beddoe and Mr. David Mackintosh believe that the Anglian features (and also the Frisian, as nearly affined to them) were more prominent than the Saxon. On abstracting the four doubtful skulls, the average nasal projection in Table I would be the same as in Table II—.012 inch (.03 cm.).

Very few of the crania of the bronze period in the three museums were sufficiently perfect to allow of measurements being taken from the basion; but it was ascertained that the projections already taken (page 248) became reduced, on an average, by .12 inch (.03 cm.) at the half-inch limit.

It is unfortunate that the locality which the Saxons proper inhabited in Europe, before they commenced their wanderings, is undefined. The skeleton features of the people, as distinct from other Teutonic tribes, are in consequence unrepresented in any German publication; and but little information can be obtained about early Saxon skulls. The plates of Teutonic crania, available for comparison, illustrate a region in South Germany that appears to have changed its inhabitants. It contains, however, a district in which local names, according to Mr. Isaac Taylor,<sup>1</sup> resemble a number still met with in Saxon counties in England, as well as some parts of France and Sweden.<sup>2</sup> And it is in the locality alluded to that many German anthropologists believe that, if not the earliest, the most distinct traces of the "Teutons" are to be met with.<sup>3</sup>

One point of considerable importance is the dolichocephalism

<sup>1</sup> "Words and Places," p. 87. Mr. Taylor does not find Saxon names in Sleswick.

<sup>2</sup> *Ibid.*, p. 79. It is supposed that the Suiones were pure Teutons, and that they were nearly related to, if not of the same race as the Swedes. Some of the earliest classical writers speak of the Teutons as inhabiting islands in the North. Retzius, as stated in the text, considers the Swedes and Saxons as nearly related in blood (*see* p. 244).

<sup>3</sup> Since this paper was read, Dr. Brande has communicated an interesting paper to the "*Antiquary*," on the prevalence of Saxon words in the neighbourhood of Minden.

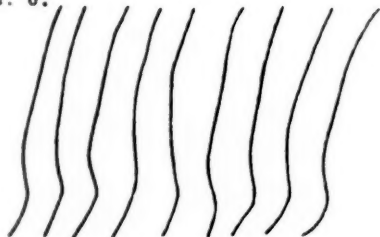


of a large proportion of the ancient skulls in this part of Germany. From Table I, in Ecker's "*Crania Germaniæ*," it appears that two-thirds have a breadth-length or cephalic index below '75. Nine only exceed '80, and these were all derived from three tumuli at Allensbach, Attinsheim, and Sinsheim. Judging from the plates, the skull forms and skeleton features resemble very closely those called Saxon in this country. The brows do not appear to have been prominent, the nasal bones project at an obtuse angle, and the forehead is more or less vertical.

The resemblance between English and German Teutonic skulls from old tombs will be seen on comparing tracings of skeleton profiles in the "*Crania Germaniæ*," with the average Saxon profile shown in fig. 4, derived from plates in the "*Crania Britannica*."

The German examples are half the natural size.

FIG. 6.



As in the case of the skulls of the true dolichocephalic or long-barrow type in England, the calvaria of the earlier dolichocephalic skulls in Germany appear to be evenly narrow, and the nasals more prominent than in the facial skeleton of the later sub-dolichocephalic Teutonic type; and the face is more orthognathous. Any further discussion, however, of the pure dolichocephalic type must be postponed until more progress has been made in the identification of its racial affinities.

In the important work just completed by MM. De Quatrefages and Hamy (the "*Crania Ethnica*"), though no example is given of a Saxon or Anglo-Saxon skull, there are plates of two typical German crania in profile, one representing the brachycephalic type prevailing in Bavaria and the South; the other the sub-dolichocephalic Teutonic type, which accords with the description given above. In a note, Professor De Quatrefages informs us that dolichocephalism increases rapidly in going north and east in Germany.<sup>1</sup> This would probably be amongst a more Teutonic population.

<sup>1</sup> "*Crania Ethnica*," Plate LXXIV. and note. M. Spengel, of Gottingen, is quoted as giving a cephalic index of '79 to that district. At Lorentzberg this falls to '75 (according to M. Lisseur), and to '73 above New Stettin and Dantzig.

Returning to a point which has already been alluded to, namely, whether prominence in the nasal bones may not be sexual, and consequently of little value as a racial characteristic; though it would probably be found that the female brow is generally smoother and more vertical than in the male, the form of the nose, though finer, is equally racial. Professor Flower, in a recent paper (read before the Institute in 1880), said: "The nose is one of the most important of the features as a characteristic of race, and its form is very accurately indicated by its bony framework,"<sup>1</sup> and so we find that the nasal bones of the women of the bronze period projected at an angle indicative of a high-bridged nose; and this character prevails amongst women in populations amongst which it is found to be most remarkable in the male: as, for example, Dublin, East Norfolk, the East Riding, and the North of England.

Perhaps the best evidence that Saxons generally, whether men or women, had smooth brows, and straight nasals of but slight projection, is obtained from General Pitt Rivers' collection of skulls from Wiltshire cemeteries, the great majority of which are pure Saxon, and present remarkably even contours.

So large a percentage of Anglo-Saxon skulls (so called) have smooth brows, and nasal bones of moderate projection, that it would seem, as said before, that those exhibiting prominent brow-ridges and sharply projecting nasals are not true Saxon examples, but either Anglian, Frisian, Jutish, or mixed.

Mackintosh expressed an opinion more than twenty years ago that ethnologists could not make much progress in the work of classification without perceiving the necessity of distinguishing between Jutes, Frisians, and Saxons. The Angles also, he and Dr. Beddoe believe, were closely allied to the Frisians, and had prominent features.

As a further step in the identification of Teutonic faces, it was necessary to inquire whether living features, corresponding to the osseous profiles of skulls from early cemeteries in Germany, are found in that country at the present time.

Presumably Cymric in the north-west, and Celtic and Iberian in the south, a large residue of the German population remains to which the term Teuton may properly belong; and it is believed that the early features of the race survive and can be recognised.

Shadow, writing fifty years ago, says (in his "National-Physionomieen")<sup>2</sup> that "the prime distinction in the German face

Early skulls from the neighbourhood of Bremen appear also to be sub-dolichocephalic.

<sup>1</sup> "Journ. Anthropol. Inst.," vol. x, p. 160.

<sup>2</sup> Page 81.

proper is, *that it departs from the Caucasian type more than is observed in other (European) nations.*"

Amongst the lower orders, presumably less mixed than the aristocracy, he states that the lower portion of the face, as compared with the middle (or the part occupied by the nose), is in the ratio 3 to 2. This is not so in what he terms the Caucasian face, where the proportions are equal.

The German cheeks also are described as large, and the lower jaw long. The nose is not prominent, and terminates in a bulb. The nostrils are full. The upper lip, which is short, "produces as a consequence, an apparent heaviness in the lower jaw." This is said to be a very characteristic feature of the pure German race.

In two of the profiles of Germans on Trojan's Column, the lower part of the face is represented as longer than the middle. To find a long upper lip in a German face, Schadow says, we should have to seek for it in modern pictures. Oval faces were common amongst the higher classes in Germany in his day. In other cases they were rounded.

Illustrations are given of all classes. The first, which is described as a good example of the feminine type, has a rounded face. The profile shows an incurved nose; the cheek-bones are wide, and the eyes prominent, all of which characteristics, Schadow says, are to be seen in the works of the *earlier* German artists, and so continued up to the time of Sandrard, when Italian and Greek types were introduced into the art schools of Germany.<sup>1</sup> This information is important, since portraits are often referred to as exhibiting national characteristics.

Amongst male portraits there are two of James Paine and his son, by Holbein,<sup>2</sup> which are given as English illustrations of the German type of face throughout Europe, and one very common in England, "perhaps even representing the English physiognomy itself." The nose in both cases terminates in a slight bulb, and the lower portion of the face is broad and heavy. Another illustration (measured from life) is of especial value. It is given as illustrating Schadow's Caucasian type of beauty, due to a greater length of the nasal region, accompanied with and harmonised by a longer mouth, and presumably straighter lips, than is found in the Teutonic face pure. The fair hair and tipped nose, however, in this example, he says, indicate a German origin. The example is from Mecklenburg, and represents probably a mixed type—Cymric and Saxon. It is curious to note the difficulty Schadow experienced in defining racial features, owing to the use of the unfortunate term "German."

<sup>1</sup> "National-Physionomieen," p. 81.

<sup>2</sup> Schadow, "Atlas," Plate XXI.

Another portrait, "Scola,"<sup>1</sup> exhibits the type of the lower classes in Germany: the cheek-bones are wide, the lower jaw long, and the nose thick, with a bulb at the tip, which is also a conspicuous characteristic in the face of Cardinal Kollowrath, whose physiognomy is said by Schadow to be "*eine rein Deutsche*,"—pure German.

Before leaving Schadow it should be mentioned that he was a sculptor of some eminence, and member of several foreign societies. He lived in the earlier part of the present century.

Without any of the special knowledge of races possessed by anthropologists, he was aware that there was some mixture of blood in Germany; and he looked for examples of the pure German or Teutonic type in the ranks of the lower classes. Living, however, in a part of Germany where it is believed that the Teutonic type proper prevailed, the above description of the "German" physiognomy is of considerable value for the purpose of comparison with English types.

It will be well to quote his view, as an artist, of the value of single portraits for illustrating racial types. "Since it is impossible," he writes, "to represent in a palpable shape general appearances,<sup>2</sup> it is necessary to content ourselves with choosing some individual whose physiognomy presents none of the peculiarities of another type."<sup>3</sup>

Acting on this principle, there will be little difficulty, I believe, in obtaining photographs to illustrate the typical races forming the population of the British Isles for the acquisition of which, in connection with a correct definition of racial types, a committee has been appointed by the British Association.

On comparing the foregoing description of the true German type of face, which appears to be that of the Teuton proper, with the physiognomy which, if not dominant, is common in some parts of Sussex at the present day, there appears to be a remarkable concordance which will assist much in its identification throughout Great Britain generally, as well as in France<sup>4</sup> and other countries.<sup>5</sup>

<sup>1</sup> Schadow, "Atlas," Plate XXVIII, fig. 4. The low situation of the ears in this subject is noticed as remarkable.

<sup>2</sup> This is perhaps the case even now, though by an ingenious process Mr. F. Galton is able to form composite portraits, in which minor differences are eliminated.

<sup>3</sup> "National-Physionomieen," p. 80.

<sup>4</sup> Photographs of public characters in France, with all the features above enumerated, on being recently submitted by me to M. De Quatrefages for his inspection, were accepted by him as representing the Teutonic type.

<sup>5</sup> The last number of the "Bulletins" of the Anthropological Society of Paris, published last July, contains a paper by M. De Mérejkowsky: "Sur un nouveau caractère anthropologique" ("Bull. Soc. Anthropol. Paris," 1882; Sér. III, t. v, p. 293), in which he shows the importance of the nasal bone as a racial feature even more characteristic than the skull form itself.

The main characteristics of the Saxon type appear to be :—

1. An elliptical face.
2. Wide, but not high cheek-bones.
3. Smooth brows.
4. A vertical forehead.
5. Nasal bones short, and slightly projecting: ending in more or less of a bulb.
6. Eyes prominent: blue or bluish grey.
7. Hair light.
8. Ears flat, with a lobe proper.
9. Lips moulded, the upper one waved.
10. Stature moderate: rather above the average.
11. Form rounded, and bones well covered.
12. Mean cephalic-index about  $\cdot 75$ .

This definition accords very closely with the Saxon type of Beddoe and Mackintosh.

The survival of the Teutonic type, as well as that of the earlier races in this country, is proved not only by the close correspondence of osseous forms, but also by the fact that features not generally supposed to be permanent exhibit great similarity wherever descendants of the original inhabitants have existed under circumstances favourable to the conservation of original racial characteristics, even in localities far remote from each other, and from the common ancestral centres.

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#### NOTE.

Besides endorsing the views of Dr. Thurnam, and other English anthropologists, that the earliest skulls were dolichocephalic, M. De Quatrefages' recognition of the fact of the survival of early types confirms the provisions of the distinguished craniologist above alluded to.

Dr. Thurnam, in a paper on British and Gaulish Skulls in the "Memoirs of the Anthropological Society of London," used these words :—"I conclude with an interrogation: Is it not probable that the long and short skulls found in the two classes of the most ancient tombs of England, which have occupied so much of our attention, are the direct and but slightly modified descendants of those truly primeval long-heads and short-heads whose remains from time to time are found in the bone-caves of western Europe—in England, Belgium, Germany, France, and the Spanish peninsula? For a satisfactory answer, time must be afforded; and, in the words which were employed

by the Father of Medicine, with a different application, we may exclaim, 'Life is short, and art long; the occasion fleeting, the judgment difficult!'"<sup>1</sup>

DISCUSSION.

Dr. BEDDOE thought Mr. Park Harrison's method of working was satisfactory, and might lead to some solid results. With respect to the similarity between long-barrow skulls and Anglo-Saxon ones, he said that Professor Rolleston, while stating that his museum assistant (not an anthropologist) could usually distinguish them, laid down no canons of any importance on the subject, except as to the greater width and strength of the Saxon jaw. The prominent browed, aquiline nosed Danish type, was not the only one prevalent in Denmark. There was something feminine about the Anglo-Saxon brows and nose root. He quoted Herr v. Rüttimeyer, who constituted a Burgundian type from skulls found at Belair and elsewhere, which skulls, however, Von Hölder believed to be those of female Allemans or Burgundians, the Hohberg being the corresponding male type. There was much yet to be done in England with respect to Iberian and other primeval types. The best-marked type now existing in Siluria had not, usually, curly hair, which Tacitus especially noted as present in the Silures.

Professor THANE, Mr. ATKINSON, and the PRESIDENT also joined in the discussion.

<sup>1</sup> "Mems. Anthropol. Soc. Lond.," 1864, p. 519.

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